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ABSTRACT

Based on research completed in 1977 and comments on a 1979 preliminary version of this report, this work evaluates current interlending practices among participants in the United Nations Educational, Scientific, and Cultural Organization (UNESCO), and proposes various models of interlibrary lending provision. The paper outlines the elements necessary in an interlending system, assesses the impact of technology on interlending, and presents factors relevant to the design and criteria for judging the effectiveness of interlending systems. Current practices are summarized as far as possible, and in the light of such information, potential basic and combined models are suggested. Examples of interlending systems draw mainly on those in the United States, United Kingdom, and Federal Republic of Germany, but a summary table covering 42 countries is also provided. Factors telling against efficient national interlending systems are enumerated, and the relationships between national interlending systems and other elements requiring national policy decision making are identified. A discussion of the mechanics of interlending is accompanied by a simplified flowchart of interlending procedures. On the basis of these findings, conclusions are drawn and further studies recommended. The report concludes with the reprint of a paper by Maurice Line and Stephen Vickers on the principles of national interlending systems. (Author/ESR)

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NATIONAL INTERLENDING SYSTEMS : A COMPARATIVE STUDY OF EXISTING SYSTEMS AND POSSIBLE MODELS

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PREFACE

This study, prepared under contract to Unesco by the IFLA Office of International Lending, has been carried out by Maurice Line, Director-General of the British Library Lending Division and Director of the IFLA Office for International Lending; Antonio Briquet de Lemos, Assistant Professor in the Department of Librarianship at the University of Brasilia; Stephen Vickers, Assistant in the IFLA Office for International Lending; and Sidney Smith, Head of International Services at the British Library Lending Division. The research on which this study is based was carried out in 1977; as a result, a preliminary report was published in 1978 (PGI/78/WS/24).

This report was revised in the light of comments received and the final version completed in 1979. The study attempts to evaluate current interlibrary lending practice and proposes various models of interlibrary lending provision. Few countries have appreciated the scale or importance of interlending, but several have recently replanned or are replanning systems at a fundamental level. Comprehensive accounts of current practices and their effectiveness are lacking. This study outlines the elements necessary in an interlending system and assesses the impact on interlending of technology. Factors relevant to the design, and criteria for judging the effectiveness of interlending systems are presented. Current practices are summarized as far as possible, and in the light of such information, potential basic and combined models are suggested. Factors telling against efficient national interlending systems are enumerated, and the relationships between national interlending systems and other elements requiring national policy decision making are identified. The mechanics of interlending are also briefly considered. On the basis of these findings, conclusions are drawn and further studies are recommended. The document is of relevance to all those involved in interlending, but is of particular significance for those involved in making overall decisions on matters of policy and design.

The designations employed and the presentation of the material in this study do not imply the expression of any opinion whatsoever by Unesco concerning the legal status, the regime or the frontiers of any country or territory. The opinions expressed are the authors' and do not necessarily reflect the views of Unesco.

Under the original terms of the contract, the study was to comprise a main report on national interlending systems plus two annexes, on interlending in various countries of the world, and a bibliography, respectively. Published by Unesco, the present study contains only the main report. The two annexes, prepared by Antonio Briquet de Lemos, will be published separately and kept updated by the IFLA Office of International Lending.

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NATIONAL INTERLIBRARY LENDING SYSTEMS

SYNOPSIS

Access to documents has lagged far behind improvements in bibliographic control. IFLA's programme of Universal Availability of Publications (UAP) is an attempt to correct the balance. Most countries have interlending practices that have grown up over the years, so that for few countries is it possible to build up a clear picture of the structure of interlending, to estimate demand, or to assess performance.

1. ELEMENTS OF A NATIONAL INTERLENDING SYSTEM

Collection of documents. Existing holdings of libraries in a country are rarely adequate for the supply of documents wanted on interlibrary loan. They may be supplemented by cooperative acquisition schemes or by a central loan collection or collections. The differences between cooperative and centralized resources are fundamental to interlending systems.

Machinery is needed not only for acquisition but for the retention of documents withdrawn by libraries.

Means of locating documents. There are 3 main means of locating documents:

(a) By union catalogues. These are the commonest means of access to library holdings. Problems include currency, coverage, difficulty of use, and cost.

(b) By directing requests to specialized libraries, or to more general libraries with strong resources in special fields. Specialized schemes are likely to be closely connected with national or cooperative acquisition programmes.

(c) By directing requests to central loan collections, with more or less comprehensive acquisition of given categories of material.

Procedures for requesting and supplying. These do not greatly affect the total interlending system.

Communications. Mechanisms for transmitting requests include mail, road transport, telex, telephone, facsimile transmission and computer. For transmitting documents, mail, road transport, and schemes combining the two are the main alternatives.

2. THE IMPACT OF TECHNOLOGY ON INTERLENDING

The main technological changes likely to affect interlending are:

Possible changes in the pattern and form of publication. These include publication in microform, publication in summary form (eg synopsis journals), high density storage such as holographs, bubble memories and crystals, and the on-line "electronic journal".

Changes in locating, requesting and supplying documents. The main technological developments are facsimile transmission, television technology, other forms of document transmission (eg satellite), and computer technology.

3. FACTORS RELEVANT TO THE DESIGN OF INTERLENDING SYSTEMS

These include geography and population, constitution, stage and nature of development, education and research, communications, book production, library resources, and, especially, copyright law.

4. CRITERIA OF A NATIONAL INTERLENDING SYSTEM, AND FACTORS AFFECTING PERFORMANCE

The three main requirements are:

adequate satisfaction level

adequate speed of supply

lowest costs for achieving adequate satisfaction and speed.

Satisfaction level. Defined as the proportion of actual requests satisfied. The number of requests may be constrained by expectations of the system, 70% satisfaction within a country is a reasonable minimal aim. The heaviest interlending demand is likely to fall on journals, science and technology, and recent and common materials.

Speed of supply. Only rarely do supply periods of longer than one or two weeks (but less than three or four weeks) seriously inconvenience the user's work, but provision has to be made for cases of real urgency (supply within one week). Speed is more important for scientific and technical material, especially serials. First-time success is a very important determinant of speed. The most serious delays usually occur not in transmission but in the requesting and supplying libraries.

Cost. Costs may be direct or indirect, recurrent or capital; they may be differently perceived by requesting libraries and in national economic terms. If high satisfaction and speed targets are set, central loan collections are the most cost-effective. Lower targets can be attained at less cost by different systems.

5. FEATURES OF EXISTING INTERLENDING PRACTICES

Union catalogues are universal, though their number and coverage vary

enormously. Union lists of serials are much commoner than of monographs. Some union catalogues are published, often in microform.

Direct requesting to libraries holding required items is common.

Centralization may take the form of a union catalogue centre through which requests are directed, or the source of supply may be centralized. Except in the United Kingdom, only limited examples of the latter exist.

Regional organization is not uncommon, especially in federal countries. Circulation of requests, among libraries or union catalogue centres, is practised in several countries.

Subject specialization may be planned as an element in interlending, or exist as a result of cooperative acquisition schemes, or occur by virtue of the existence and nature of particular research institutions.

Hierarchical structure, with requests going through different levels or channels in a prescribed order, appears in some countries.

Most countries have a focus for interlending, usually associated with the national library, but often it is not clear where responsibility for the supervision of interlending lies.

It appears that satisfaction rates often do not exceed 70%, and supply times of 3 weeks or more are a norm rather than an exception. Costs seem likely to be generally high.

6. MODELS OF NATIONAL INTERLENDING SYSTEMS

Several basic factors are involved: degree of centralization; national or regional (sub-national); hierarchical nature; unity of provision for all libraries; unity of provision for all types of literature.

The basic factor used here is the degree of centralization. Four basic models are identified:

Model A. Concentration on a single library. A single collection, possibly dedicated to interlending, on which interlending demand is concentrated. A dedicated collection would probably have to be built up specifically for the purpose, but it could gather older material from other libraries and also serve as a national repository. A shared library (perhaps a national library) would combine lending to other libraries with a service to its own clients. Despite savings in duplication, there is a danger that its two services may conflict.

For serials, a central collection of 8,000-9,000 titles can satisfy 90% of demand, and 5,000-6,000 titles satisfy 80%. The number of monographs required to reach different satisfaction levels is much harder to determine: an intake of c.100,000 a year might be sufficient to satisfy 80% of demand.

The advantages of concentration on a single library are:

a single channel for most requests;
ready response to demand;
easier provision of national imprints and marginal material;
low direct costs of handling requests;
economical for libraries to use.

The main disadvantages are:

high costs of setting up and maintaining;

high unit costs per request unless demand is heavy;

possible uncertainty as to future financing;

risk of damage to collection;

possible danger of a monopoly;

possible unleashing of "unnecessary" demand.

Model B. Concentration on a few libraries. In many countries, most titles are contained in a few libraries, on which interlending demand might be concentrated, and which would be reimbursed for lending. Their routines would have to be adjusted. Their resources could if necessary be enriched. Central planning and coordination are essential. Advantages and disadvantages are similar to, but less critical than, those for Model A.

Model C. Planned decentralization, in which the provision of material is allocated between libraries on a systematic basis. Advantages are: direct transmission of many requests; resources can serve both local and national needs; low additional costs of provision.

Disadvantages include:

possibly high total costs because of extensive duplication; possible conflict between lending and other functions; need to adjust procedures to give an efficient service.

Superimposition of specialization on general libraries has numerous disadvantages, and interlending systems based on cooperative acquisition schemes do not have a good record.

Model D. Unplanned decentralization. In most countries, the existing

resources of libraries are made available by means of union catalogues. In spite of apparent economies, there are numerous disadvantages. Neither less common documents nor documents in heavy use can be easily provided; substantial resources are necessary to maintain the union catalogues; the first responsibility of cooperating libraries is to their clients, not to interlending; there is no way of ensuring that provision matches demand; hidden costs are high; and effectiveness is likely to be low.

Composite models of provision. Since even a high degree of centralization cannot by itself achieve an ideal performance, either for current or (especially) past publications, Models A or B need to be supported by other systems on the lines of Models C or D or both. Models C or D may support one another.

Centralization of access. This can be achieved only with a national interlending centre to which many or most requests can be directed. Such a centre may be linked to a national loan collection, or it may be responsible for maintaining the main union catalogues. Access may also be partly centralized (possible in Model B), or totally decentralized (usual in Models C and D).

Union catalogues may perform a minor role in support of a central lending collection, or may be maintained in unpublished form by a centre, or published, or, if automated, consulted on-line. Published union catalogues can be very expensive, although Computer Output Microform and ISBN lists with location codes can greatly reduce costs. There should be as few union catalogues as possible, planned as a system rather than allowed to develop independently.

National or regional (sub-national). Interlending can be organized nationally or regionally. Regional systems may be appropriate in federal countries, and

in some other circumstances, but should generally be avoided because of the inevitable duplication of resources and the problems of organization.

Hierarchical nature. Hierarchy may be of provision or of access. Hierarchical provision can take several forms, with a national lending collection either at the apex or at the base. Hierarchy of access can be slow because many requests may fail at the first level, and may be best if not rigidly imposed.

Unity of provision to all libraries. There may be practical or historical reasons for separate interlending systems, but they are rarely justifiable.

Unity for provision for all types of literature. Central loan collections can aim to cover all material, or can be limited by subject, language, date or form. A restricted central collection should concentrate first on recent scientific and technological journals.

A system of concentration on a few libraries would probably be based on some specialization in the first place.

Since it is easy to justify central loan collections for certain types of material, mixed models AC and AD may be attractive.

7. FACTORS TELLING AGAINST EFFICIENT NATIONAL INTERLENDING SYSTEMS

Factors associated with failure to satisfy requests

Unavailability of requested item in a country
Inability to locate item
Unavailable at location when requested
Item not loanable.

Factors associated with delay

At requesting library:

Inefficient internal procedures

Checking of requests

Need to select source of supply

Use of different forms and procedures for requests to different sources.

In transmission:

Long distance

Slow communications.

At supplying library:

Inefficient internal procedures

Need to handle a variety of forms or procedures

Requests with inadequate information

Failure to supply.

Factors associated with high costs

Inefficient internal procedures

Variety of forms and procedures

Checking of inadequate or inaccurate requests

Selection of possible source of supply

Need to send requests to several sources

Need to make more than one application

Expensive transmission of request (must be weighed against extra speed)

Expensive transmission of document

Reclaiming and accounting procedures

Union catalogues

Provision of adequate document resources for loan or photocopy.

Improvements in some aspects are independent of others. Planning at a national level, for example to standardize procedures, would reduce the effect of many of these factors. So would the establishment of a national loan centre, and the improvement of union catalogues. Comprehensive central collections could achieve the greatest impact, but their cost may rule them out. Greater efficiency in local libraries, and more use of photocopies in place of loans are desirable.

8. OTHER ASPECTS OF INTERLENDING SYSTEMS

Efficient systems in neighbouring countries may permit a lower level of national self-sufficiency, but great caution is desirable before relying substantially on other countries.

National interlending programmes and national acquisition programmes are closely related and should be planned together. Model C implies a strong national acquisition programme. Model A can exist independently of, or even render unnecessary, such a programme. Model B can be independent or part of a national acquisition programme.

National interlending systems and national repository programmes also need to be considered together, and provision should be made to ensure that material withdrawn from libraries is subsequently available. A Model A collection is a national recipient for such material. Model B, and to a lesser extent Model C, can also meet this need.

9. MECHANICS AND PROCEDURES OF INTERLENDING

Mechanics and procedures are affected by local requirements and by the design

of the total interlending system. Outline procedures for both requesting and supplying libraries are given, to indicate the main elements likely to be present, and to serve as a checklist. Attention is drawn to the items of stationery involved at various stages; it is shown how the number of forms and the amount of typing or writing can be kept to a minimum. The design and use of the interlending request form requires special attention.

10. CONCLUSIONS

There is a need for considerable improvement, and sometimes radical change, in the interlending systems of many developed countries, and an equal need for developing countries to build effective interlending systems into their national library plans. Interlending must now be regarded as an issue deserving consideration in its own right and total systems must be planned.

Model A - a dedicated centralized collection - has many advantages, but its costs alone may rule it out except in large developed countries with substantial demand. However, there may be a strong case for partial collections. Combined reference/lending collections should be seriously considered, especially for developing countries.

Model B - concentration of demand on a few libraries - is a cheaper alternative to Model A. It may be satisfactory for smaller developed countries, or for some developing countries.

Model C, planned decentralization, is suitable for some large developed countries that already have a sound basis for it. Not recommended for other countries.

Model D, unplanned decentralization, is by definition not an efficient alternative. Its only value is as a support for strong Models A or B.

Union catalogues are essential where access to more than 2 or 3 libraries is required. They need to be carefully planned, designed and coordinated.

Regionalization of interlending systems is not generally desirable.

All types of recorded knowledge need to be provided for, but not necessarily by the same system.

Hierarchies, of provision or of access, will exist with mixed models.

Two possible models that might be appropriate for a developing country are:

Model 1 would consist of a central core collection of 5,000 science and technology titles, organized to give a fast service. Humanities and social science serials would be supplied by the national reference library, possibly supported by selected specialist collections. Other materials would be supplied from a combined national reference/loan collection, supported by unpublished union catalogues of selected libraries. The national library would serve as the national interlending centre, with a dedicated loan collection of national imprints.

In Model 2, provision for science and technology would be concentrated on 3 or 4 specialist libraries in government-funded research centres, planned to provide at least 5,000 core serials, adequate photocopying facilities, and with sufficient duplication of documents to serve both local and distant users. They would be backed up by union lists of selected libraries.

Humanities and social science documents would be provided from a combined reference/loan collection, supported by unpublished union catalogues of selected libraries. Again, the national library would serve as an interlending centre, with a dedicated collection of national imprints.

Some countries face serious obstacles in interlending, including personal liability on the part of the head librarian, inadequate photocopying equipment and shortage of foreign currency. A more general and urgent problem is copyright legislation.

Other aspects of importance are interlending statistics, for planning and for regular monitoring of services; the question of payment, which is crucial for Model B and may be important for other models also; and interlending centres, which should be linked with any national library planning centre.

INTRODUCTION

Interlibrary lending - the supply by one library to another of documents wanted by individuals - is of great and growing importance, both within and between countries. The reasons for this are clear: there has been a great growth in the number and cost of publications, and a comparable growth in education and research and development at all levels has stimulated demand for publications. These factors are common to nearly all countries. To the large output of developed countries has been added the rapidly growing output of developing countries. Demand has been stimulated by improvements in bibliographic access, most significantly in the last few years, when the use of automation has both made the production of new bibliographic tools possible and added a new dimension with direct on-line access to computer-stored references. IFLA's programme of Universal Bibliographic Control (UBC) is coordinating and furthering bibliographic access both nationally and internationally. Users are thus being presented with a larger number and wider range of references, with a speed that has led them to be less content with slow access to the documents to which they refer. At the same time, economic pressures have forced many libraries to cut down on their acquisitions.

In consequence, libraries have become increasingly unable to provide their readers with all the publications they wish to use, and have had to draw more and more on the resources of other libraries. Interlibrary lending, once a marginal activity that was regarded as a favour rather than a right, has become an essential feature of the library scene in every country where libraries have developed beyond a certain level. It is equally essential for developing countries, where development - industrial, agricultural, medical and educational advancement - must depend a great deal on access

to knowledge as contained in published documents. IFLA recognized three or four years ago that its UBC programme must be accompanied by a parallel programme of Universal Availability of Publications (UAP), and UBC and UAP are main elements in IFLA's Medium Term Programme. Availability encompasses more than interlending, but interlending is the heart of UAP in the sense that without it major improvements in availability are unattainable.

It is probably fair to say that few countries have fully appreciated the scale or importance of interlending. The scale can be illustrated by the example of the United Kingdom, where the volume of interlibrary loan demand grew from an estimated 400,000 requests in 1962 to an estimated 3,350,000 in 1977 - an increase of more than eightfold in 15 years. It is true that some of this increase is attributable to the founding and development of the National Lending Library for Science and Technology, and later to the creation of the British Library Lending Division in 1973, so that the 1962 figure may have been artificially constrained by deficiencies in the service (although it was comparable with that of any other country), but the fact that the creation of an adequate service can uncover such a very large volume of demand in fact serves to emphasize the scale of the problem. It is highly probable that in the United Kingdom before 1962, and in many developed countries today, many users are not getting documents that they want to read and that are important to their research or practice. Access to documents has evidently lagged far behind bibliographic access, whereas the two should surely be in balance if serious frustration is not to result. It is probably significant that several developed countries, dissatisfied with interlending systems that have been by no means undeveloped, have recently replanned or are now replanning their systems at a quite fundamental level: the United Kingdom, the United States of America, France and Canada are all examples.

No statistical analysis has to our knowledge been made of interlibrary loan demand in relation to indicators of economic and social development. Some correlation might be expected, since education and research are two functions of development, and they affect the demand for documents. However, beyond a certain level of development one would expect local libraries to be more numerous and adequate, and interlending demand therefore to decline somewhat. In fact, one of the main determinants appears to be the existence of an efficient interlending system; and good local libraries can actually generate new and additional demands. In the United Kingdom it was found that smaller university libraries did not in general make more interlibrary loan demands per researcher than larger ones.[1]

It is desirable here to make a distinction between systems, mechanisms, procedures and practices:

A practice is what libraries actually do.

A procedure we define as a formally recognized practice.

A mechanism is something established specifically to serve a purpose: a union catalogue, or an interlending centre.

A system is a coherent and systematically planned set of mechanisms, procedures and practices. ("A set of elements with relations between the elements such that the set may be looked at as a whole"*).

Most countries do not have systems in the sense defined here; they have mechanisms, procedures and practices which may or may not form a coherent whole. There may for example be various mechanisms such as union catalogues which have developed independently, for the use of which different procedures are recommended, and which in practice are less used than direct approaches to other libraries on the basis of personal knowledge or expectation of their holdings. It is therefore strictly inappropriate in the case of most

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1. Line, M.B. and Ede, S J. Interlibrary lending statistics: their collection and use. BLL review (Boston Spa), vol. II, no.2, April 1974, p44-50.

* See note at end of chapter.

countries to talk of interlending systems. Nevertheless, we use the term in this loose sense as shorthand for the various mechanisms, procedures and practices in use.

It was our hope when we started this study that we would be able to find in the literature adequate descriptions of the interlending systems in use in quite a few countries, and that moreover there would be some indication of the performance of these systems, which would enable us to make a comparative assessment of different types of system. However, although there are many references to interlibrary lending in the literature, we found very few adequate descriptions of interlending systems, and most of these were in Western Europe or Anglo-America. It soon became clear that not only are there in fact few 'systems' in the sense of machinery systematically designed to serve interlending demand, but comprehensive accounts of mechanisms, procedures and practices are rare. Such descriptions as there are tend to concentrate on formal mechanisms and procedures - that is, the union catalogues in existence, the operation of a national centre if one exists, and possibly the recognized machinery for interlending. However, they rarely state whether these mechanisms and procedures are used for the majority of interlibrary loans, or which types of library tend to use them. In some countries, systems appear to cater solely for public or academic libraries - sometimes, as in Sweden, there are separate systems for public and academic libraries - and it is not clear what special libraries do, or even whether the majority of public and academic libraries use the formal system. Even when there is some description of the interlending system, only in very rare cases is any indication given of its performance: what proportion of requests are satisfied, how quickly, and how economically. The existence of an interlending structure, however impressive, is no guarantee of its effectiveness or efficiency, and there seem to be examples of quite elaborate mechanisms which are bypassed much of the time

in practice because of their unsatisfactory performance. The nature of any formal system, and what libraries actually do, may be completely different.

This extreme paucity of published information on how libraries in different countries actually practise interlending, and how well they fare, has constituted a major and fundamental barrier in our attempt to fulfil the specific terms of our contract. Without this information, it is obviously difficult to comment with much confidence on the relative effectiveness of different types of system.

One way of supplementing published information would have been to correspond with selected countries to obtain a fuller and clearer picture. This was not possible for several reasons. In the first place, it would not have been reasonable to conduct such a correspondence until a literature search had been conducted; but by the time the search had been completed, there was insufficient time to collect further data in this way, although the draft descriptions were sent to individual countries for comment and several were revised or brought up to date in consequence. Secondly, it would be difficult in many countries to identify persons who could provide authoritative information on the interlending system in use; and it is almost certain that they could not have provided any data on its performance, for the simple reason that few countries have studied their interlending performance. Information on the performance of interlending systems appears in fact hardly to exist in most countries, exceptions being the USA, the Federal Republic of Germany, and the United Kingdom.

A more satisfactory method of collecting information would have been to visit selected countries. However, this would have been very expensive and time-consuming, and, while a reasonable picture of interlending systems and

practices might have been built up, it would still not have been possible to obtain information on performance unless special studies could have been conducted in each country.

This study is therefore less comprehensive and detailed than we would have wished. We have collected what information we could on the interlending systems of as many countries as possible, not confining ourselves to the principal systems only. If we have drawn heavily on the experience of the British Library Lending Division and its predecessors, it is because it is well documented rather than because of our personal knowledge. If similar information had been available on interlending in other countries, we would have used it. We have identified various main types or models, though we have rarely been able to link with these models actual examples of interlending systems, because clear examples could not usually be found. Finally, we have, on the basis of what is known about the operation of interlending systems, suggested which models seem likely to be particularly applicable to countries of different types, sizes and stages of development, and tentatively identified two models that may be especially appropriate for developing countries.

We make in this report some assumptions that should be stated at the outset. The first is that just as most individual libraries aim to serve all their readers, without making value judgments as to their expressed needs, so the aim of interlibrary lending is to supplement this provision in whatever way is required. While most interlibrary loan demands may, at least in developed countries, be for the purpose of research or serious study, if only because most recreational needs are not for specific documents and can be satisfied from a range of locally available material, interlibrary lending is for all who need it. In any case, there is often in practice great difficulty in distinguishing 'serious' and other needs, and literature of all levels can form the subject of research.

We assume also that interlibrary lending aims to supplement local provision, not replace it. The library system of any country must be constructed on a firm basis of adequate local provision, however efficient its interlending system may be.

Another assumption is that interlending needs to be, and can be, planned. There is sufficient evidence to demonstrate serious flaws in unplanned interlending, and we regard any national library plan as seriously incomplete unless interlending is an integral element in it. Nevertheless, some recent national library plans, and writings on national library planning, pay little or no attention to interlending; the need and right of all individuals to gain access to published documents they require may be accepted, but the means by which this can be achieved is not considered.

We do not consider in this report the informal cooperation that will always exist at local level between neighbouring libraries. This may take the form of transferring books between libraries or of suggesting to readers that they try neighbouring libraries. The first is indeed interlending, and may be substantial in volume, but it plays only a minimal part in any national system, and cannot easily be included in the design of such a system.

We are concerned only with published material, including 'semi-published' documents such as report literature, but not manuscripts or archives. We use the term 'document' or 'publication' to refer to all such forms of recorded knowledge, whether they are in conventional printed form, in microform, or audio-visual products such as a sound tape or a film.

The structure of the report, in which interlending is approached from various angles, leads to the appearance of some points several times in different chapters. Rather than elimination of such repetition, reiteration of

significant points in different contexts seemed positively desirable.

Five terms used in the report should be defined here:

Interlibrary lending (interlending for short):
"a cooperative arrangement among libraries by which one library may borrow material from another"*. It is held here to include the loan of originals or the supply of copies (in hard copy or microform) in place of the original.

Monograph: a conventional 'book', as opposed to a serial, a report, an official publication, or a 'non-print document'.

Serial: "a publication issued in separate and successive parts, usually in a uniform format with constant title and intended to be continued indefinitely"*.

Report literature: "documents containing the findings of an investigation or study by an individual or group"*. Not published commercially, but made available through institutions or special agencies. They may be produced in a number of copies or be made available on demand.

Non-print document: any form of recorded knowledge other than printed (or manuscript) documents, whether in hard copy or in microform; includes sound recordings, films, etc.

N.B. The definitions marked * are taken from Wersig,G and Neveling,U. Terminology of documentation. Paris, Unesco, 1976. Their definition of "monograph" does not distinguish it from some report literature or non-print documents, and is not therefore adopted here.

1. ELEMENTS OF A NATIONAL INTERLENDING SYSTEM

The matters dealt with here are nearly all considered in greater depth in later chapters. This chapter is intended merely to specify the essential elements of interlending systems in order to aid and clarify subsequent discussion.

Interlending systems consist of several elements:

1. Collection of documents
2. Means of locating documents
3. Procedures for requesting documents
4. Procedures for supplying documents
5. Communications.

1.1 Collection of documents

It is obvious that documents cannot be lent unless they are available. For an effective national lending system, the proportion of documents required that must be available is substantial. In developed countries, the assumption may be made, and often is (sometimes wrongly), that the existing holdings of libraries constitute an adequate pool for the supply of documents required on interlibrary loan. In developing countries, where collections are much poorer, it may be necessary on the one hand to make the fullest use of the documents that are available, but on the other hand they may in total amount to only a small proportion of what may be required on interlibrary loan.

Some means of enriching the pool of documents already acquired by libraries for their own purposes must therefore often be sought. In developed countries, many attempts have been made to achieve this by cooperation between libraries, whether on a national or regional basis;

national schemes are sometimes comprehensive, sometimes organized by subject or language group. In some cases, these schemes have been funded by a reduction in duplication between the cooperating libraries, but in most cases extra financial resources have been needed to buy the additional publications. One difficulty on which several schemes have foundered is that in times of economic pressure, when cooperation is most needed, cooperating libraries are least able to find extra resources to acquire materials that their own clients are unlikely to need. Additional funds from government or other sources may be sought, but in this case it may prove more satisfactory to place the publications so required in a single centre rather than distribute them among a group of cooperating libraries.

A radical alternative to cooperative acquisition schemes under which items acquired are dispersed among cooperating libraries is a central collection or collections which can acquire items specially for the purposes of interlending. Such a central collection may be funded by the cooperation of a number of libraries, like the US Center for Research Libraries in Chicago, or it may be directly funded by the Government, as in the case of the British Library Lending Division. The differences between cooperative and centralized resources, and the arguments for and against each, are fundamental to the whole question of interlending systems.

One major question to be decided concerns the sort of material that should be provided for interlending. Cooperative acquisition schemes have generally concentrated on the less common materials that libraries do not normally buy for the use of their own clients, and that would not therefore be available unless they were specially acquired. However, studies in more than one country have shown that the heaviest demand falls not on the least common items, but on items that are held by many

libraries but that they cannot easily or quickly supply to requesting libraries because they are in use. A system designed to satisfy peripheral demand may therefore fail to satisfy adequately the main bulk of demand.

Another major question concerns the retention of documents that have been acquired by libraries in the country. Most libraries at one time or another discard less used materials, among which may well be items that have been acquired in the past under cooperative schemes. Libraries faced with pressures on their space may have to face a hard decision whether to retain such items or to dispose of them. Unless there is some special machinery for retention or disposal to an appropriate centre or centres, such items may be lost to the country in future. That this has happened in the past is clear from the inability of some countries to supply their own publications on interlibrary loan - publications that may once have been commonly held in libraries, but that have evidently been discarded by one library after another. There may indeed be archival copies in national reference libraries, but these may be unique and not loanable.

National lending systems are therefore intimately bound up with national acquisition policies and national disposal and repository policies.

1.2 Means of locating documents

The three main means of locating documents are:

a. by union catalogues;

b. by directing requests to libraries specializing in the relevant field;

c. by directing requests to central collections.

These means may be used separately or, more usually, in combination.

a. Union catalogues. These are catalogues consisting of the holdings, complete or partial, of a number of libraries in the country. Libraries

are expected to report, currently and possibly retrospectively, to a centre which maintains the union catalogue. This centre may be national, regional or local; it may be permanent, or it may be ad hoc for the purposes of a particular catalogue; it may be independent, or attached to another organization. Union catalogues may be comprehensive, or may be limited in various ways:

by form of material (the commonest division is into serials and monographs);

by subject (eg. medicine, law, etc);

by locality (region or conurbation);

by type of library (eg. academic or public);

by language (eg. books in oriental languages);

by country or region of publication (eg. Latin American publications);

by date (eg. pre-1700 publications).

These characteristics may be combined, for example medical serials, or monographs in a given conurbation. Union catalogues may be unpublished, in which case requests have to be directed to the centre holding the union catalogue in question; or they may be published, whether in hard copy or microform, in which case libraries can send requests direct to identified locations; or, if they are maintained by computer, they may be accessible on-line, with the same effect as for published union catalogues except that on-line catalogues are likely to be more up to date. Among the problems associated with union catalogues are:

difficulty in keeping up to date (with new acquisitions and with deletions);

inadequate coverage, especially of all the publications acquired before union catalogues were started;

difficulty of use, particularly when there is a multiplicity of union catalogue;

cost, both to the cooperating libraries in submitting entries and to the centres in compiling and maintaining the union catalogues. Nevertheless, union catalogues are the commonest, and often the only, way of obtaining access to the holdings of existing libraries.

b. Directing requests to specialized libraries. Requests may be directed to specialized libraries, or more general libraries known to have strong resources in special fields, in a more or less formal or informal manner. In a formal system, specialist libraries may be identified as the main national resource collections in their fields, as in the Federal Republic of Germany; or, as in some of the regional schemes in the United Kingdom, libraries may attempt complete coverage of certain categories of publication by dividing the field of knowledge between them, on an arbitrary basis rather than in relation to local specialist demand. In an unplanned system, there will still be libraries that are highly specialized or are known to be strong in a particular field, and requests may be directed to these with a fair expectation of success. Formal specialized schemes are likely to be closely connected with national or cooperative acquisition programmes.

c. Directing requests to central collections. Requests may be directed to loan collections attempting more or less comprehensive acquisition of given categories of material. This is the case with the British Library Lending Division, to which libraries may send any requests for serials or report literature, or for recent (post-1960) English language monographs, with a high probability of success. Alternatively, the centre may publish lists of its holdings, as does the Center for Research Libraries in the USA.

1.3 Procedures for requesting

At the simplest, one library may request items from another simply by writing a letter, but in almost all cases special interlibrary request forms are used. There may also be recognized procedures that are followed. Requesting procedures, though an essential element in an interlending system, are not greatly affected by, nor do they greatly affect, the total interlending system, except insofar as the use of a single supply source, or a limited number of supply sources, clearly makes the imposition of standard request forms and procedures much easier, and also simplifies matters for requesting libraries in that they can direct all or most of their requests to one or very few centres. Interlending mechanisms are dealt with more fully in chapter 9.

1.4 Procedures for supplying

As with requesting procedures, supplying procedures can be simplified and standardized if only one supply centre or a limited number of supply centres is involved. However, since speed of supply is affected to a considerable extent by the procedures used by the supplying library, they are more closely related to the general design of the interlending system. Since it is desirable for a variety of reasons to satisfy as many requests as possible by photocopies, adequate photocopying machinery is essential for any supplying library. The basic machinery required is for making direct hard copy; additional desirable equipment includes machinery for making microform from hard copy, for making hard copy from microform, and, less essential, for making microform copy of microform.

1.5 Communications

There must obviously be effective means of transmitting requests and of transmitting documents. Mechanisms for transmitting requests

include mail, road transport, telex, telephone, facsimile transmission and computer. When distances are small, for example within cities, requests may be delivered personally, using local transport. Use of the telephone is unsatisfactory in most cases because of the difficulty of ensuring correct transcription of complex requests, the time required to transcribe them, and the absence of a form that can be used by the supplying library. Computer and facsimile transmission both require compatible machinery in requesting and supplying libraries, and of course electronic links between the machines. These prerequisites at present exist only in a relatively small number of libraries. Both computer and facsimile transmission, especially the former as more libraries are equipped with computer facilities and linked to networks, show much promise for the future; it has been suggested that access to the proposed National Periodicals Center in the USA should be by computer only, and links with data bases, whereby computer searches can be followed immediately by document requests, are likely to favour the use of computers for requesting. Nevertheless mail and telex are likely to continue to be the main methods in the immediate future in most countries.

For transmitting documents, mail, road transport, and schemes combining the two are the main alternatives. The relative costs and speeds will vary according to local circumstances. Relatively small distances may favour road transport schemes, as in the United Kingdom, where experimental non-postal schemes in certain areas have proved both cheaper than mail and more reliable in speed of supply, and it is planned to extend such schemes over the whole country. Experiments with facsimile transmission, most of them in the USA, have so far shown it to be grossly uneconomic, and even though costs may fall somewhat they are unlikely to fall to a level where facsimile transmission becomes viable for more than a relatively few very urgent requests.

One main reason for preferring use of photocopies for retention rather than loans of original documents is that they are much cheaper to send and do not need to be returned. The communication facilities in each country are clearly likely to have a considerable effect on the design of the interlending system, but this effect should not be exaggerated: as will be seen, studies in developed countries have shown that most delays occur not in transmission but in the requesting and supplying libraries. A more serious problem than speed in some countries is reliability of delivery: a high probability that documents will be delivered is clearly essential.

2. THE IMPACT OF TECHNOLOGY ON INTERLENDING

This is a time of rapid technological change. Some of this will undoubtedly affect interlending and should therefore be taken into account in the design of national lending systems. It must however be borne in mind that, while the potential implications for the future may be large, there may be a considerable period before much effect is felt, and in the intervening period improvement is urgently necessary if interlending demand is to be adequately met. Not only may developments be slower than has sometimes been predicted, but their economic implementation may prove difficult and will certainly take time. Moreover, there is a vast quantity of documents in the world's libraries in conventional form, to which conventional access is provided. Even if technology has a radical influence on the system of the future, the great body of knowledge enshrined in past publications has still to be made available. It may be significant that the USA, one of the most technologically advanced countries in the world, recently initiated legislation to set up a National Periodicals Center to provide access to ordinary journals,[1] although there is dispute about its design, and it has been argued that technological developments now make it unnecessary.[2]

This chapter merely indicates where the main impact of technology may occur. No attempt is made to elaborate on the technological and economic issues involved, nor to consider possible future interlending systems based on the possible technology of the future: there are too many unknown factors in the situation, and the possible permutations of technological advances on various fronts are too numerous, for such consideration to be very fruitful at present for the purpose of this study. It could however be worthwhile to carry out, as a separate study, a review of alternative futures for the supply of documents.

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1), 2), References on p. 17A.

1 Gwinn, Nancy E. A national periodicals center: articulating the dream. Library journal (New York), vol. CIII, no. 19, November 1, 1978, p. 2166-2169.

2 Little, Arthur D., Inc. A Comparative evaluation of alternative systems for the provision of effective access to periodical literature. Washington, D.C., National Commission on Libraries and Information Science, 1979. Various paginations.

The major technological changes likely to affect interlending are in the form and pattern of publication, and in locating, requesting and supplying documents.

2.1 Possible changes in the pattern and form of publication

Major changes in the nature and form of publication have been prophesied for many years. In particular, it has been forecast for several decades that many more documents will be published in microform. Although to date few major changes have been apparent, economic circumstances, combined with a continued growth in the reporting of research and the writing of other documents, have led to much more intensive study of the whole question. The main proposals have been:

a. Publication in microform.

b. Publication in summary form, eg. in synopsis journals, with full text supplied on demand, whether in microform or hard copy.

c. High-density storage such as holographs, bubble memories and crystals, whether reproduced in copies that libraries can acquire or accessible remotely from a centre or centres.

d. The 'electronic journal', in which papers are submitted, refereed and edited on-line, and are also available subsequently on-line.

Microform publication is now well established, though it is not used for more than a minority of publications, most of them research reports and other documents likely to be in low demand. Until now it has supplemented rather than substituted for conventional publication. Its existence and growth are unlikely to affect interlending systems significantly, precisely because the material in question is not likely to be in heavy demand. It is possible for libraries to build up large collections in microform, and many libraries did so in the 1960s, but more recently the acquisition of large quantities of material that is very rarely wanted has been questioned;

it is not usually cheap to acquire, and it may be much more economic to obtain particular items as required by readers from publishers (or re-publishers) or from central collections, which can provide copies and so preserve file integrity. Paradoxically, therefore, a cheap publication medium may argue rather for central collections than for local acquisition on a large scale.

On-demand production of single copies (of articles, reports or even monographs) from master copies already exists in a limited way, and is currently the subject of several experiments. It is often linked with 'synopsis journals' - journals published in the ordinary way but containing only synopses of the articles, the full text of which has to be specially requested. This solution is attractive as helping to solve the economic problems of learned journal publishers while still making the material fully available to anyone who wants it. It has yet to become fully acceptable to authors, or for that matter to users, but it may prove a better alternative in the long term than microform publication of low-demand material on a large scale, if only because of the resistance of many users to microform. The growth of on-demand publication argues strongly for a central supply source which holds the originals and can make copies available on demand. Since the publishers clearly have some interest in the supply of this material, they may wish to set up their own supply centres, separate from central loan collections. Such a solution seems likely to be uneconomic for publishers and to cause difficulties for libraries and their users, and it would appear preferable to seek an accommodation with publishers whereby any central loan collection acts in effect as an agent for the publishers in return for appropriate payment.

High-density storage, while technically feasible, is still at an experimental stage, and it is difficult to say much about it until economic as well as technical feasibility has been demonstrated.

The 'electronic journal' has been strongly advocated by Professor John Senders and others,[3,4] who have confidently put it forward as the form of the future, superseding much or most conventional journal publication. Quite apart from the economic problems still to be overcome, objections to such a form of 'publication' seem likely to be no less than the objections to microform, and for similar reasons. Among the likely disadvantages are the need to be close to a computer terminal or to read computer print-out, much greater difficulty in scanning a text in the way that a conventional document can be scanned, and the physical unattractiveness of the medium compared with ordinary printed material. The adoption of the 'electronic journal' would clearly have a radical effect on the whole nature of library use, including interlibrary lending, but it seems unlikely that it could ever supersede publication of journals of high status with large circulations, and it has not to our knowledge been suggested that it should supersede monographs.

There is no doubt that various alternatives to the conventional printed page will continue to be explored, and that some at least will prove viable for certain kinds of material. However, it seems doubtful if, from the viewpoint both of economics and of acceptability, conventional publication will be superseded <u>for material for which there is a substantial market</u>. Conventional publication is a highly effective and economic way of making available multiple copies of monographs and journals. If the market is adequate to support conventional publication, there seems no good reason for abandoning such a well-tried form. Wholesale drastic solutions such as are sometimes proposed are most unlikely to be generally applicable. Little attempt has evidently been made at a systematic analysis of various kinds of material, their nature, readership and market, and the ways in which each can best be made available economically and acceptably.

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3 Senders, J.W. & others. <u>Scientific publication systems: an analysis of past, present, and future methods of scientific communication</u>. University of Toronto, Dept. of Industrial Engineering, 1975. iii, 181p.

4 Lancaster, F.W. <u>Towards paperless information systems</u>. New York, Academic Press, 1978. xii, 179p.

Our conclusion is that such changes in the pattern of publication as can be clearly envisaged at present need not be taken into great account in designing interlending systems, but that such effects as they are likely to have may tend to favour central loan collections.

2.2 Changes in locating, requesting and supplying documents

The main technological developments relevant to locating and/or requesting documents are:

a. Facsimile transmission

b. Television technology

c. Other forms of document transmission (eg. satellite)

d. Computer technology.

a. Facsimile transmission

There have been several experiments, mainly in the USA, in the use of facsimile transmission to transmit the text of documents between libraries. All of these have foundered on cost - not merely the rental of the machine and the costs of transmission, but the cost in labour. Even though the newest machines are much faster than previous models, and can transmit very few machines will copy printed works direct, on most machines two pages a minute, the quality of reproduction at this speed is poor, and even if it were adequate the method is still far too slow and costly for all but a small minority of urgent requests. A more promising use of facsimile transmission is for the transmission of requests. Accurate transmission can be ensured, and no additional typing or writing costs are incurred. Whether or not this is cheaper than the use of telex depends on a number of factors, such as the cost of labour and the machinery available in each country. Computer transmission seems more likely to suceed telex as a means of fast transmission.

b. Television technology

Recent developments in television technology, such as the Prestel (perhaps better known by its earlier name of Viewdata) system being developed by the British Post Office, may aid access to the holdings of libraries. It seems most unlikely that union catalogues could be held in this form, which is not suitable for the display of very large files of detailed records because of the cost of storage and the small size of the television screen. However, directories of specialist collections could well be made available in this way, and the ease of use and wide availability of equipment may make this an attractive subsidiary aid to interlending.

c. Other forms of document transmission

Satellites have been used to transmit information over long distances, but at great expense where the information exceeds a few pages. Their use within countries seems very unlikely to be justifiable in economic or in any other terms. The same seems likely to apply to other forms of long-range transmission.

d. Computer technology

The greatest impact on interlending is likely to be that of computer technology. It can, as we have seen, affect the form in which documents are held. It can also be used to construct and maintain union catalogues, and to publish them, in hard copy or more usually on Computer Output Microform (COM). Computer-held union catalogues can also be accessed on-line, and this facility may also aid cooperative acquisition policies, thus affecting document provision. The bibliographic checking of requests against authoritative files is possible (it is, for example, being used currently at the British Library Lending Division). Finally, requests for documents can be made on-line.

Several experiments have already been conducted into use of the computer for these purposes, and there are several operational systems that use computer technology. Of these, the most advanced and well known is the computer network operated by OCLC Inc. On-line access to automated union catalogues can undoubtedly improve the currency of union catalogues and the speed of locating, requesting and responding, and possibly the distribution of requests; it may well supersede more conventional forms of union catalogue, and will certainly play a part in the future design of interlending systems, whether centralized or decentralized.

Whether the use of computers will significantly affect the balance between central loan collections and cooperative acquisition programmes depends on several factors. First, appropriate computer systems must be developed; this is easier to achieve in developed than in developing countries. Secondly, effective on-line systems require that at least the majority of the main user libraries have appropriate terminal facilities. Thirdly, even in developed countries, computer systems can provide access to only a limited (though increasing) proportion of the documents required unless existing union catalogues are automated or cooperating libraries submit entries in machine-readable form for existing holdings; catalogue conversion on this scale is a huge undertaking. Fourthly, fast access to locations, and the speed of requesting offered by on-line request systems, do not in themselves make the documents available; libraries are often unable or unwilling to supply many of the documents for which they are requested on interlibrary loan, because they are in use locally. This disadvantage could be reduced, but probably not removed, by on-line requesting and response systems, so that immediate negative response from one library could be quickly followed by a request to another library, thus reducing the delays inherent in multiple requesting. Finally, and perhaps most critically, documents have to be acquired before they can be supplied: computer access can assist document supply, but can hardly extend document provision unless the system is used also for cooperative acquisition.

3. FACTORS RELEVANT TO THE DESIGN OF INTERLENDING SYSTEMS

There are numerous factors, most of them independent of the library system of the country, that will affect the design of a national interlending system.

3.1 Geography and population

The physical size of the country is less important than its communication system and the distribution of its population. A very large country whose population is concentrated in a few urban centres creates far fewer problems for library service than a country of a similar or smaller size whose population is widely scattered in small towns: fewer libraries are needed in the former case, and the communication system required can be relatively simple. Nor is the size of population itself of prime importance - the volume of demand depends much more on other factors such as education and industrialization.

The geographical situation of a country is relevant insofar as cooperation with, dependence on, or supply to neighbouring countries is feasible. This obviously depends on the characteristics of neighbouring countries. Cooperation is likely to be more feasible if there is some similarity in library requirements - if, for example, books in similar languages or on similar subjects are required, as may be the case with Spanish-speaking countries in Latin America at a similar stage in industrial and agricultural development. Cooperation will also depend for its value on the quality of library provision in neighbouring countries, as well as on communications between the countries - and whether these are significantly better than with other, more distant countries whose library provision may be better.

3.2 Constitution

A country with a federal constitution that gives a high degree of autonomy to states or provinces may find centralization less feasible and acceptable than one with a non-federal constitution, even if, as seems likely, the economics of the argument are not affected.

3.3 Stage and nature of development

Not only will the volume of demand per head of population normally be far greater in developed than in developing countries, but the nature of demand is likely to be significantly different, with a much greater emphasis on agriculture and medicine in most developing countries, and a higher level of demand for pure science and very recent publications in developed countries. The degree and nature of industrialization will also affect the nature of interlibrary loan demand. Even between developed countries of a roughly similar nature, interlibrary loan demand can differ significantly: for example, journals account for only 50% of demand from US academic libraries, compared with 64% from British academic libraries.

Not only the level of industrialization, but the distribution of industry in the country may affect the design of an interlending system. Industry that is heavily concentrated on a few areas can be more easily served than widely distributed industries.

3.4 Education and research

These are partly but not wholly functions of economic growth. Higher priority may be given to education, especially higher education, in some countries than others, and the level of postgraduate research is likely to differ widely, even among developed countries. In developing countries, the proportion of research devoted to applied science, technology and economics is likely to be greater than in developed countries.

The level of education in the adult population will also affect interlending demand. In developing countries, there may be a substantial demand that cannot be satisfied in local libraries for literature of an intermediate level, for self-educational or even recreational purposes. Indeed, one would expect the average level of literature requested on interlibrary loan in developing countries to be rather 'lower' than in developed countries, but one would also expect this to be a temporary phenomenon; as local libraries improve and the level of education becomes higher, the level of literature requested is likely to become gradually 'higher'.

3.5 Communications

In most countries, mail will be used for the great majority of requests and loans. The speed of the mail service will depend in turn on air, rail and road transport. In countries of a large geographical size. air transport is necessary if long delays are not to occur.

For the transmission of requests, telex and, where possible, computer links can provide faster transmission than mail. As for the transmission of documents, where mail is used over long distances, items should be sent by airmail rather than surface mail.

Although an adequate system of communications is of course essential if interlending is to take place at all, within certain limits speed of transmission may not be critical: as noted elsewhere in this report, studies in several developed countries have shown that the most serious delays occur not in transmission but in requesting and supplying libraries. Nevertheless, all delays should be cut to a minimum, including delays in transmission.

3.6 Book production

Some countries publish far more than others, and the disparity in the production of research literature, especially in science, is even greater. Research literature production is heavily concentrated on a few countries, most notably the USA and USSR. This may be a temporary phenomenon - in particular, social science literature in some developing countries is growing very rapidly - but it is striking that the concentration has changed little in the last 20 or 30 years. Users in the more productive countries are clearly likely to find more of the literature they require in their local libraries, or available elsewhere in the country, than users in countries that produce little. It is also easier for such countries to ensure adequate provision of at least a fair portion of literature required on interlibrary loan. Similar considerations apply, to a lesser extent, to the provision of literature in the main language of the country; about half of all learned journals are in the English language, and Australia, say, is therefore in a better position to make adequate provision than, say, Indonesia.

3.7 Library resources

The strength of existing library resources, and the money available for developing new resources, are clearly two critical factors, which depend in the first case largely on history and in the second on economic development. While a developed country may be prepared to make available substantial additional resources to have a fast interlending service, if necessary duplicating the resources of other libraries, in developing countries the emphasis may have to be on maximizing the use of existing libraries. However, if all factors are taken into account, cooperative systems of this kind are not necessarily more economic than collections developed specially for interlending, or alternatively than the deliberate development of an existing library to serve the purpose of interlending as well as its present function.

3.8 Copyright law

Copyright legislation is far too complex an issue to be dealt with in this report. However, its impact on interlending can be profound. Journal articles constitute the majority of requests in most countries. The supply of photocopies for retention is usually much cheaper and more satisfactory than the loan of original documents in the case of articles in journals or conference proceedings and of report literature in microform: cheaper in running costs because transmission costs are less and because the copies do not have to be returned, more satisfactory because the user can retain the item. Most important of all, the supplying library retains the original documents, which can still be used to serve its own clients and satisfy other interlibrary loan requests; indeed, whether many items can be supplied at all may depend on whether they can be photocopied. This factor may affect the whole design of a national lending system.

Copyright legislation could inhibit the supply of photocopies in two main ways. Permission from copyright owners may be required before copies are made, and this can be such a lengthy procedure that it may rule out photocopying as a regular practice. Secondly, payment of royalties to publishers (or even perhaps authors) may be necessary, and this may cancel out much if not all of the cost advantage over loans of the original. The other advantages, however, for the design of a national lending system, notably the difficulty and capital cost of ensuring in any other way an adequate and fast supply of journal articles, seem likely to make it preferable to alternative systems based on loans.

4. CRITERIA OF A NATIONAL INTERLENDING SYSTEM, AND FACTORS AFFECTING PERFORMANCE

The three main requirements of a national interlending system are:

1. Adequate satisfaction level (proportion of requests satisfied)
2. Adequate speed of supply
3. Lowest cost for achieving adequate satisfaction and adequate speed.

4.1 Satisfaction level

There are several considerations that have to be borne in mind when determining the satisfaction level at which interlending systems should aim. In the first place, satisfaction levels should be defined as the proportion of interlending requests satisfied, not the proportion available of some hypothetical list of desiderata. This question is parallel to that of assessing the adequacy of a local library. There are two main ways of doing this: by checking the library's holdings against a list of items that the library might reasonably be expected to have, and by checking the availability of items actually required by users. There are deficiencies in both methods. Comparison with a checklist depends greatly on the quality of the checklist; and even the best may contain many items that, however 'significant' they may be, may not actually be wanted by any of the library's users. It is difficult to think what kind of checklist might be used to assess the quality of a country's interlending provision, and this method must be ruled out if only for practical reasons.

The problem with the second method is that the demands actually placed on a system are likely to be affected by the quality of the system. In a local library, for example, a reader may not ask for items he does not

expect to be available, and if the library stock is poor he may miss a number of references relevant to his work, since most references are known to be obtained from other publications, and he may therefore never ask for relevant items. Expectation of success (or of speed of supply) can affect both the actual volume of demand and the nature of demand: the less adequate the system is, or is believed to be, the lower the percentage of 'difficult' requests that are likely to be placed on it.

Nevertheless, if a certain satisfaction level is set as an aim, and the present performance compared with it, deficiencies will be revealed for some categories of material at least. and if improvements are then made in the system, expectations will increase. This increase in expectation and the consequent increase in demand may lower the satisfaction level again, so that further action may be required. The better a system becomes, the more requests it will attract, until saturation point is reached.

It follows from these considerations that, if a low satisfaction level is set as an aim, improvements in the system may not be believed to be necessary, and a large amount of demand may remain latent. On the other hand, if the satisfaction level is set at a very high figure, it is possible that it will never be reached, because outstanding performance will generate very high expectations, not all of which can be met. It is suggested that, assuming that the national lending system can satisfy requests with reasonable speed (see below), and that the speed of supply is greater than can be attained by obtaining items from other countries, 70% satisfaction is a minimal aim within a country. Below this level, would-be users are likely to experience frustration, or restrict demands because of low expectation, or both. For national imprints - the

publications of the country itself - 100% satisfaction should be aimed at, because the country of origin is the obvious and often the only source of most publications.

In deciding whether to supply items from within a country or from abroad, other considerations as well as speed have to be taken into account. Apart from political considerations, which may in themselves be decisive, the most important factors are economic. In most countries, obtaining items from abroad is likely to be considerably more expensive than obtaining them from within the country, if only because of higher postal charges. Any item wanted, or likely to be wanted, more than two or three times within a country is probably cheaper to acquire if copies are not already held than to obtain from abroad on loan. It seems likely that, as suggested above, levels of national self-sufficiency below 70% are unlikely to be economic, though detailed and complex economic studies in individual countries would be needed to establish this.

The satisfaction level will depend not only on the existence of wanted items in a country, but on the ability to locate them, and then on the ability of libraries to supply them. The highest percentage of failures is likely to occur with items at the extremes of demand - those in very high demand and those in very low demand. The reason why the latter may be unavailable is obvious: they may not be held by any library in the country. High demand items are likely to be unavailable because, although held by many libraries, they may well be in use at the time, or libraries may be reluctant to lend them because there is a good chance that local users will want to consult them. As pointed out below, the heaviest interloan demand falls not on obscure items but on common ones. For example, an analysis conducted at the British Library Lending Division

showed that the three most heavily requested journals were Science, Biochimica et Biophysica Acta and Nature - all high status journals, held in many British libraries.[1] The rank list of journals in order of demand bore a similarity to the rank list of journals in order of size of circulation, and of status as assessed by citations received.[2] The main reason why commonly held material receives heavy interlending demand is that while it may well be in most large or medium-sized libraries, most libraries are small and do not hold it. Also, a requesting library's copy may be at binding when required, or may be disposed of after a year or two to save binding costs and space.

If the experience of the British Library Lending Division[3] - which, it should be remembered, receives over 18% of its demand (500,000 requests in 1979) from other countries - is any guide, it appears that the heaviest interlending demand is likely to fall on the following categories of material (not mutually exclusive):

Journals (about two thirds of demand)

Science and technology (two thirds or threequarters of all demand)

Recent publications (50% of demand or more for monographs is likely to fall on those published in the last 10 years, and for journals on the last 5 years).

Common material (rather than obscure material).

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1. Line, M.B. and Wood, D.N. The effect of a large-scale photocopying service on journal sales. Journal of documentation (London), vol.XXXI, no. 4, December 1975, p.234-245.

2. Scales, Pauline A. Citation analyses as indicators of the use of serials. Journal of documentation (London), vol. XXXII, no. 1, March 1976, p.17-25.

3. Wootton, C.B. and Ede, S.J. The BLLD success rate study 1976. BLL review (Boston Spa), vol. V, no.2, April 1976, p.53-66.

The implications of these considerations for the design of interlending systems are, as we shall see, profound. In brief, they mean that a system solely devoted to scientific and technical journals published from a given date can hope to satisfy a very significant proportion of all demand within a few years, even if it does not attempt to go beyond a few thousand core journals.

As was noted in the Introduction, very little information on the performance of systems could be found, and so it is impossible to say what the satisfaction level of the interlending systems in most countries actually is. There is however some evidence from three countries, all of which have paid considerable attention to the design and performance of interlending systems, and which might therefore be expected to have better performances than most. These are the USA, the Federal Republic of Germany and the United Kingdom.

Although there is a wealth of data on interlending in the USA, studies have been restricted to particular types of library or categories of documents. A study of the interlending activity of academic libraries[4] in 1971 revealed that some 71% of requests for all types of document could be satisfied; interestingly, the highest success rate was for German-language documents, followed by French, with English-language material in third place. A later study[5] of the availability of periodical literature gave a success rate of 79% and a study confined to primary scientific and

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4. Palmour, Vernon et al. A study of the characteristics, costs and magnitude of interlibrary loans in academic libraries. Westport, Conn., Greenwood, 1972. x, 127p.

5. Palmour, Vernon et al. Access to periodical resources in a national plan. Washington, DC, Association of Research Libraries, 1974. ix, 171, A 1-48 p.

technical periodicals and conference proceedings[6] showed a satisfaction level of 84.2%. The commonest cause of failure was that libraries did not own documents for which they were requested.

A recent study conducted in the Federal Republic of Germany[7] of requests for post-1945 German language monographs demonstrated that the percentage for which locations could be provided by the individual regional union catalogues varied from 48% to 89%. No information is given concerning the number of requests that could be satisfied by these locations, but if British experience can be used as a guide it may be in the order of 70% - 80%. Actual satisfaction levels will therefore range from 38% to 71%. Unfortunately no data are available on the overall satisfaction level for all requested publications (in whatever language); nor is a satisfaction level ascertainable for the 40% of requests that bypass the union catalogues and are sent directly to libraries. The study revealed a high failure rate for recent German-language publications and for particular subjects.

A survey of interlending in the United Kingdom conducted in 1977[8] showed that 97% of requests were satisfied (Figure 1). The British Library Lending Division supplied, mainly from its own stock, 73% of requested documents,

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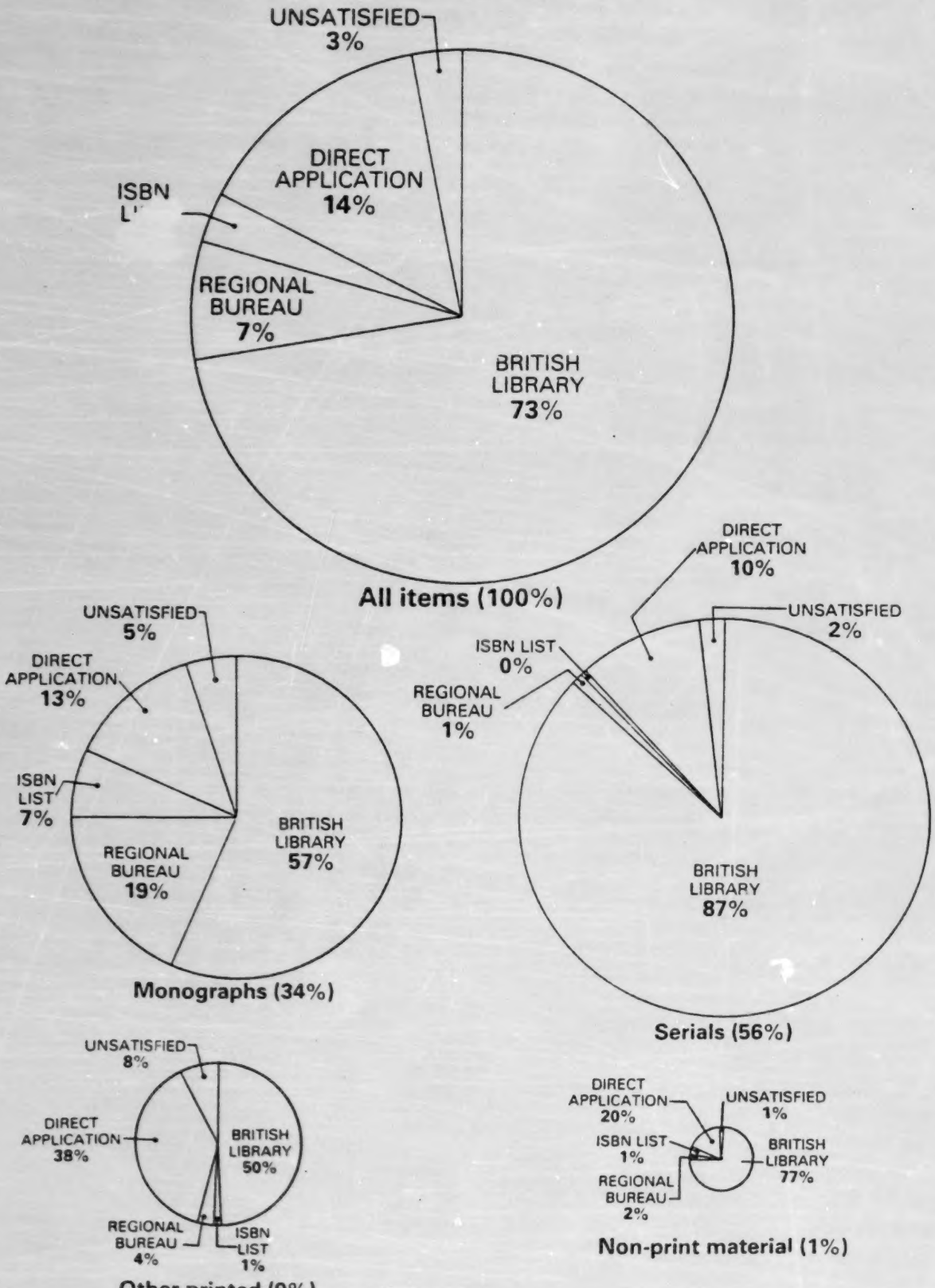
6. Wood, James. A review of the availability of primary scientific and technical documents within the United States. Final report. Washington, DC, US Department of Health, Education and Welfare, Office of Education, Educational Resources Information Center, 1969 3 vols. (ED 046 437-9)

7. Zunker, Ernst. Die Ausstattung der Leihverkehrsregionen mit deutschsprachigen Monographien ab Erscheinungsjahr 1945. Berlin, Deutscher Bibliotheksverband, Arbeitsstelle für des Bibliothekswesen, 1977. (Bibliotheksdienst (Berlin), Beiheft 126). 54p.

8. Line, M.B. and Steemson, R.J. Interlibrary lending in the United Kingdom: report of a national survey carried out in February 1977. London, British Library, 1978. 37 p. (British Library R & D Report no. 5417); Interlibrary lending in the United Kingdom: summary report of a national survey conducted in February 1977. Interlending review (Boston Spa), vol. VI, no.2, April 1978, p 31-38.

Figure 1: Satisfaction of interlending requests in the United Kingdom through different channels

NB. ISBN lists are union lists maintained by the regional systems, containing ISBNs with locations



the regional systems about 11%, and libraries that received requests direct about 13%. The failure rate was rather higher for monographs than for serials. A separate study of requests received by the British Library Lending Division[9] - which include of course many difficult requests that cannot be satisfied through other channels - showed that over 83% were met from stock and a further 8% or 9% from other libraries, identified mainly by means of the national union catalogues maintained at the Lending Division. (It may be noted that between 20% and 30% of requests for which locations are found are not in fact met)[10,11]. Failure rates were highest for foreign language monographs.

Although the actual numbers of requests involved are not very large (7,700 a year), the ability of the British Library Lending Division to supply, from its own resources or those of other British Libraries, British monographs to foreign libraries is of special interest.[12] About 80% of British monographs so requested could be supplied. Allowing for the fact that requests from abroad would tend to be for 'difficult' items, this performance is still disappointing. No detailed information is available on the Lending Division's ability to supply to foreign libraries British serials; it must be well over 90%, since 89% of valid requests from abroad

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9. Wootton, C.B. and Ede, S.J. op. cit. (ref. 3).

10. Yap, S.F. The locations service of the BLLD. BLL review (Boston Spa), vol. II, no. 4, October 1974, p.115-123.

11. Steemson, R.J. Locations survey 1977. Interlending review (Boston Spa), vol. VI, no. 1, January 1978, p.23-25.

12. Line, Maurice B. and Seal, Alan. The ability of the British Library Lending Division to supply British publications on loan to other countries. BLL review (Boston Spa), vol. V, no. 4, October 1977, p. 119-126.

for all serials are satisfied from Lending Division stock (84%) or other libraries in the United Kingdom (5%), and British serials account for only 21% of overseas serial requests[13].

There are obviously weaknesses in all of these systems, even allowing for the fact that they may be attracting a volume of demand near to saturation level. Disturbing features about the British and German systems are their inability to supply by any means all publications of their own countries (though in the case of the German survey, it should be noted that the study was concerned with books in the German language, not solely with books published in the Federal Republic of Germany). One reason for the apparently poor performance in the Federal Republic of Germany is that recent publications were evidently not being notified and entered in union catalogues quickly enough - a deficiency that is very hard to rectify, because much depends on the speed of acquisition and cataloguing of contributing libraries, although other delays may in future be reduced by entry of items into union catalogues on-line.

Although an overall 70% satisfaction level may be a reasonable minimum aim, the same level may not be necessary or desirable for all categories of material. For example, in the United Kingdom demand for monographs in languages other than English accounts for less than 2% of all interlending demand. To aim at the same satisfaction level for these as for say, English language scientific serials, which account for about 50% of all demand, would be unrealistic and uneconomic. This emphasizes the need to examine existing interlending demand before attempting to

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13. Steemson, R.J. The performance of the British Library Lending Division International Photocopy Service. Interlending review (Boston Spa), vol. VI, no.3, July 1978, 94-96.

design or improve an interlending system.

One factor affecting satisfaction rates in some countries is loss of documents in transit, evidently mainly as a result of inefficiency in the postal service or theft. This is obviously a serious matter because apart from the requests that are not met because documents are sent and fail to arrive, lack of confidence in the service is bound to inhibit libraries from sending documents on loan. Moreover, some of the documents lost in this way may be the only copies in the country, and therefore unavailable for subsequent requests. There is little libraries can do about this except to use photocopies wherever possible in place of loans and to see if more secure means of transport can be used, at least for more valuable and less common items. Such means are more likely to be possible over relatively short distances - a factor that tends to favour local loan systems. The general problem of loss in transit goes far beyond libraries, and is one for attention by governments.

Satisfaction is not of course merely a matter of supplying an item: the reader is not 'satisfied' unless he receives the item he wants within a given time, and a request met too late should be considered a failure. The question of speed is considered in the next section.

4.2 Speed of supply

The speed of supply required depends on (a) the speed with which a user wants material if he is not to be hindered in his work, and (b) the speed of supply he expects and below which he feels frustrated. The first requirement, which we may call 'actual urgency', may be unavoidable, in that a user who has only just come across a vital reference may have to have it at once in order to prosecute important work. On the other hand, it may be due to faulty planning of his work, for example failure to conduct a

full literature search at the beginning of a particular piece of research. In practice, it is probably very difficult to separate these two reasons for 'actual urgency', and studies suggest that in fact only a very small proportion of requests are seen to be really urgent in this sense.

In a survey in a number of British industrial libraries[14] of the effects of non-immediate access to material, 39% of the material was supplied by the British Library Lending Division within one week of requesting and a further 33% within two weeks. Of the 289 replies only 10% indicated that the delay had caused any inconvenience, and of these 29 people only 9 had to wait more than two working weeks. Of these 29 people, 10 found the article to be of considerable value, 15 of moderate value and four of low value. In a British medical library[15], rather more concern was expressed about delay, which caused inconvenience in 20% of cases. Delay in supply exceeded one week in only 17% of all cases, but interestingly inconvenience did not increase with the length of delay.

The US study cited above[16] found that 75% of librarians felt that material should be available within 14 days and only 18% felt that it should be available within seven days.

The other type of speed required, which we may call 'expected speed of supply', is clearly heavily dependent on the past performance of the system and the expectations to which it has led. The user who has been

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14. Houghton, Bernard and Prosser, Carolyn. A survey of the opinions of British Library Lending Division users in special libraries on the effects of non-immediate access to journals. Aslib proceedings (London), vol. XXVI, no. 9 September 1974, p.354-366.

15. Barr, Diana and Farmer, Jean. Waiting for inter-library loans. BLL review (Boston Spa), vol. V, no. 1, January 1977, p.8-12.

16. Palmour, Vernon, et al. op. cit. (ref.5) .

used to a 10-day service will perceive a delay of 3 weeks as a weakness, and a delay of, say, 3 months as perhaps intolerable. In another country, where performance was less good, a delay of 3 months might come to be expected as the norm. The effect expectations of supply speed have on the volume and nature of demand is likely to be considerable: low expectations will tend to lead to a reduction in the proportion of science requests, because these are likely to be wanted more urgently than other subjects. Likewise, serial articles are on the whole likely to be wanted more urgently than monographs (which in any case require more time for reading), and recent publications more urgently than older publications. Each request is an individual request, by an individual person for an individual item, and any categorization can only be crude, but, as a rough general guide, categories of material can be tentatively ranked in order of speed required as follows:

Scientific and technical serials

Scientific and technical report literature

Social science serials

Scientific and technical monographs

Social science monographs and report literature

Humanities serials and monographs.

As with satisfaction level, there is little objective information on the speed of supply of wanted items on interlibrary loan, except in the USA and United Kingdom. Some of this evidence has been cited above[17,18]. Also in the United Kingdom[19], it was found that 50% of material was received within 7 days of the request being sent - 6 days for serials and 12 days for monographs (Figure 2). This partly reflects the difference

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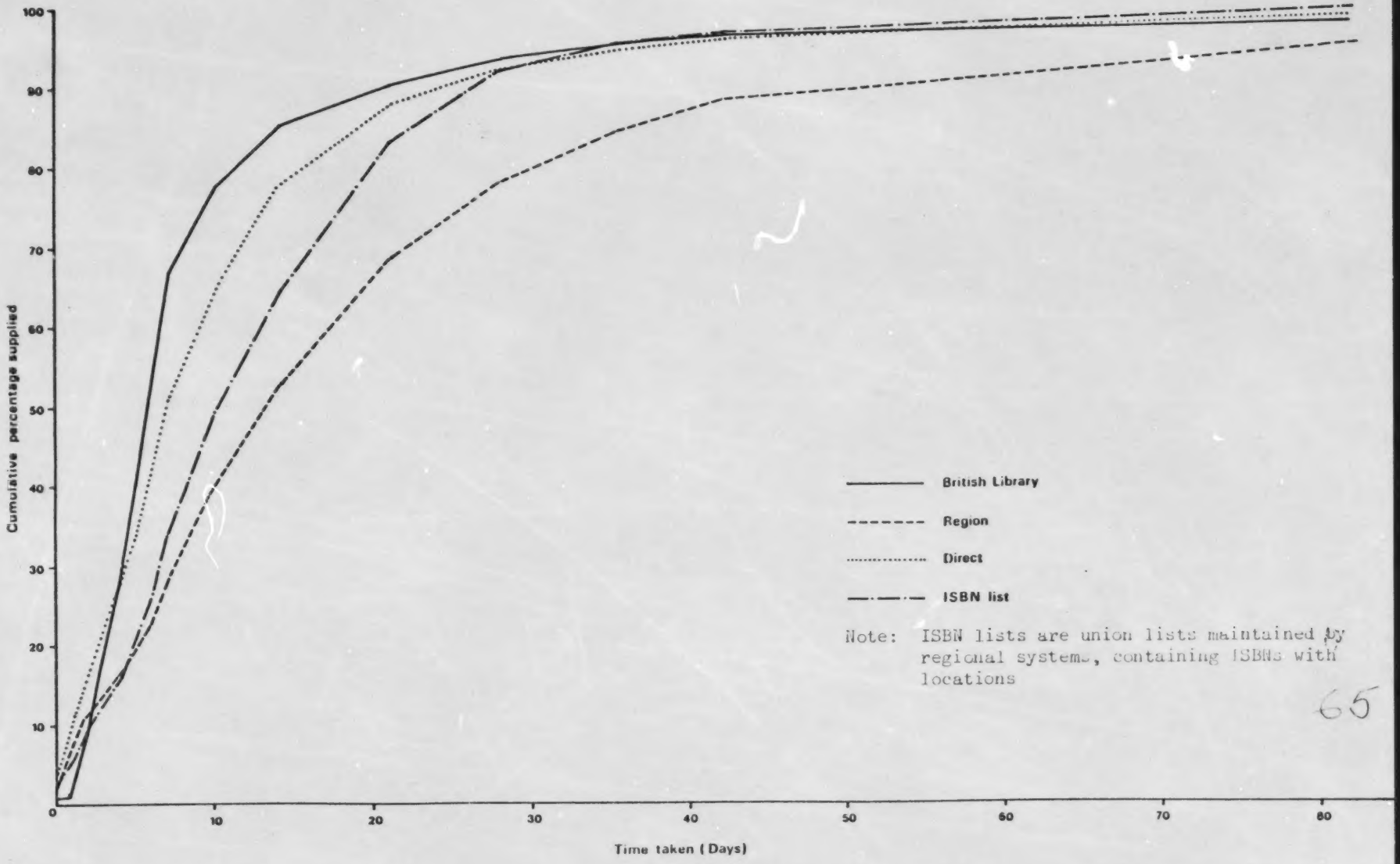
17. Houghton, B. and Prosser, C. op. cit. (ref.14).

18. Barr, D. and Farmer, J. op. cit. (ref.15).

19. Line, M.B. and Steemson, R.J. op. cit. (ref.8).

Figure 2. United Kingdom interlibrary loan requests:
Cumulative percentage supplied against time for different successful channels



Note: ISBN lists are union lists maintained by regional systems, containing ISBNs with locations

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between sending a photocopy through the post and sending a monograph on loan. The median overall time for supply from the British Library was 6 days, while for the regions it varied from five days to over three weeks. It was found that 50% of requests that were sent to one library only were dealt with within six days, while it could take between five and six weeks if three applications were needed.

In the USA[20] it was found that 90% of requests were sent from the borrowing to the lending institution in six days, and 54% were sent within three days. It was further found that 50% of filled requests were processed by the lending library in three days, while 85% took seven days. The national average for processing time within the lending institution was 48.4% in three days and 82.9% in seven days. While no overall figures are available for the total time elapsed between initiating a request and receiving the required material, various studies within networks have shown it to be in the order of 20 days for most requests.

It is clear that a very important determinant of speed of supply is whether the first request for an item is successful: the more requests that have to be made for an item, the more slowly it will be supplied. Systems with a low chance of first-time success are likely to have poor average supply times. First-time success is determined by (a) the ability to locate a copy, (b) the probability that the item is available - eg. not in use or at binding, and (c) the willingness of the holding library to lend it - reasons for reluctance to lend include fragility, rarity, reference value or recency of acquisition.

Unless communication systems are very slow, the most serious interlending delays seem to occur not in transmission but in the requesting and supplying

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20. Wood, J. op. cit. (ref.6).

libraries, since transmission in most countries rarely takes more than a week or 10 days, while overall supply times of three or more weeks are common. If these delays can be reduced to a minimum by increased efficiency and more use of standard and simple procedures, adequate speed of supply can probably be achieved in most countries without major improvements in transmission time, which in any case are probably unattainable. Systems dependent on the cooperation of numerous libraries are likely to be considerably slower than dedicated loan collections, because the first responsibility of local libraries must always be to their own clients, and neither their arrangement nor their procedures can be designed specifically to serve interlending.

A reasonable aim for most countries would seem to be a maximum of 3 weeks for the majority of requests, with a capability of achieving supply within one week for requests identified as urgent.

4.3 Cost

It is necessary to distinguish between several kinds of costs: between direct costs (costs incurred in the requesting and supply of individual items) and indirect costs (overheads such as accommodation and depreciation of stock); within direct costs, between 'hard' or overt costs such as stationery, packing material and postage, and staff costs, which may be largely hidden; between recurrent costs (the costs of running a system from year to year) and capital costs (the costs of building up stocks); and between the costs incurred by libraries and the total costs, including those incurred by users. Also, costs can be very differently perceived by requesting libraries, which may find a central collection very economical to use, and by a government which may have to set up and maintain a central collection. Many value and indeed political judgments

have to be made, for example how much high speed and satisfaction levels are worth, how much of the cost should be borne by requesting libraries, absorbed by supplying libraries, provided by the government, or even refunded by individual users. Ideally, in comparing the costs of different systems, all costs, other perhaps than those incurred by users, should be taken into account. Since hardly any information at all appears to exist on any of the costs associated with interlending, no such comparison can be made, and the best we can do is to indicate probabilities.

Given an aim of a certain satisfaction level and a certain speed of supply, how can these be obtained at minimal cost? It seems clear that high levels of performance can be achieved by developing dedicated loan collections containing comprehensive stocks of most material likely to be wanted on interlibrary loan, but how does the cost of this compare with the cost of attaining the same objectives by other means? Clearly, the higher the aims set, the more cost-effective is a dedicated loan collection likely to be, if only because, say, 90% satisfaction levels and average supply times of one week are likely to be virtually unobtainable by any other means. Conversely, low levels of satisfaction and speed may be attainable at low cost by a cooperative system with very little effort. However, it is suggested above that satisfaction levels much below 70% are unlikely to be economic in the long term, while the total costs of delay, though probably unquantifiable, may nevertheless be significant - in users' time wasted, or in inadequate research which leads to practical results that are more costly than they need be.

Although, as stated above, few costings appear to exist, some attempts have been made in the United Kingdom to cost various aspects of interlending. Lancaster University Library carried out quite a detailed comparative study[21]

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21. Ford, Jill and Ford, Geoffrey. The cost and supply delays of interlibrary loans at the University of Lancaster Library. BLL review, (Boston Spa), vol. III, no. 2, April 1975, p 47-50.

of the costs of requesting items from the British Library Lending Division and through the regional systems, and concluded that the former was considerably cheaper; the costs considered were only those incurred by the requesting library. Newcastle Upon Tyne Polytechnic Library came to similar conclusions[22]. Much the most comprehensive study, which endeavoured to take into account all costs (except those incurred by users), was that conducted in 1970-71 as part of the National Libraries ADP Feasibility Study[23], carried out immediately prior to the setting up of the British Library. This concluded that, in the United Kingdom, a central loan collection was considerably more cost-effective than other modes of provision for categories of documents in moderate or heavy demand, while union catalogues were more cost-effective for documents in low demand. Relevant factors apart from the volume of demand include the cost of the categories of documents: foreign language monographs were not only in little demand, but to acquire them comprehensively would be extremely expensive. All three of these studies relate solely to the United Kingdom, but there are good reasons for believing that some at least of the results may be more generally applicable (see Chapter 5). A model taking account of the factors of demand and cost has been developed by Arms[24], based on his work for the National Libraries ADP Feasibility Study; this could usefully be tested in other countries.

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22. Harris, K.G.G. and Marsterson, W.A.J. Interlibrary book borrowing: a little analysis of services provided through the Northern Regional Library System and through the British Library Lending Division. BLL review (Boston Spa), vol. III, no. 2, April 1975, p.51-54.

23. Great Britain. Department of Education and Science. The scope for automatic data processing in the British Library. London, HM Stationery Office, 1972. Annex D : Interlibrary lending and copying. (vol. 2, p. 363-496).

24. Arms, William. Models for interlibrary lending. Interlending review (Boston Spa), vol.VII, no.4, October 1979, p.130-136.

5. FEATURES OF EXISTING INTERLENDING PRACTICES

A thorough literature search (see Annex 1) has enabled a general picture of interlending in various countries to be constructed, but with many gaps in the information. A summary is attempted here.

In no country can interlending practices be characterized by one single element, nor is this ever likely to be the case. Even central loan collections can never be comprehensive, and other means such as union catalogues will be necessary to provide access to older material. It is therefore extremely difficult to draw together threads from the varying practices to be found in the countries described. While it has been possible to identify various elements of interlending practice within any given country, only in a few countries is the relative importance of these elements known. In a hierarchical system, what percentage of demand is satisfied by each level of provision? Where subject collections exist within a system, how much of the demand is dealt with directly by these collections? Are these subject collections dedicated to interlending, or do they merely reflect the bias of specialized research institutions? Such differences could have a profound effect upon the pattern of interlending. Why, and to what extent, is interlending conducted on a direct basis? Is it due to the lack of relevant location tools, in which case a request may be sent straight to the most promising source of supply, or is it because published lists of holdings exist, or does it simply reflect a lack of confidence in a supposedly organized system? Much of the information needed to answer these questions is lacking. Certain broad generalizations can however be made to describe current practices.

SUMMARY TABLE OF CHARACTERISTIC ELEMENTS OF INTERLENDING PRACTICE IN VARIOUS COUNTRIES

Country	Centralised handling of requests and/or supply of documents	Existence of union catalogues	Existence of specialised subject collections	Circulation of requests through several institutions	Hierarchical structure	Direct application	Organisation on a regional basis	Unstructured flow of requests	Existence of co-ordinating institution
Argentina		✓				✓		✓	
Australia	✓	✓				✓			
Austria	✓	✓		?			✓		
Belgium		✓		✓		✓		✓	
Brazil	✓	✓				✓	networks	✓	
Bulgaria		✓	✓		✓	✓	✓		
Canada	✓	✓		?		✓	✓		
Columbia		✓				✓		✓	
Czechoslovakia		✓	✓	✓					✓
Denmark		✓			✓	✓			
Finland	✓	✓	✓		✓	✓	✓		✓
France	✓	✓		✓		✓		✓	
Germany DDR		✓	✓	✓			✓		✓
Germany BRD		✓	✓	✓		✓	✓		✓
Greece		✓				✓		✓	
Hungary		✓	✓	✓	✓		✓		✓
Iceland		✓				✓		✓	
India		✓				✓		✓	
Ireland	✓	✓				✓			
Israel		✓				✓		✓	
Italy	✓	✓				✓		✓	
Kenya		✓				✓		✓	
Korea		✓				✓	networks	✓	
Luxembourg	✓	✓							
Malaysia		✓				✓		✓	
Mexico		✓				✓		✓	
Netherlands	✓	✓			✓	✓	✓		
New Zealand	✓	✓		✓		✓			
Nigeria	✓	✓				✓			✓
Norway		✓				✓	✓		
Poland		✓		✓		✓	✓		
Portugal		✓				✓		✓	
Singapore		✓				✓		✓	
Spain	✓	✓				✓			
Sweden		✓	✓		✓	✓	✓		
Switzerland	✓	✓		✓					
Tanzania		✓							✓
Turkey		✓							
USSR		✓			✓		✓		
UK	✓	✓	✓			✓	✓		
USA		✓	✓			✓	✓		
Yugoslavia		✓					✓		

Only in a few countries do we know the relative importance of the various elements of interlending practice.

5.1 Union lists

Union catalogues or union lists are to be found in all the countries described, though their number and coverage vary enormously from country to country. There are, for example, over 600 union catalogues in the USSR, while in some countries there are only one or two. It is significant that in many countries union catalogues are restricted to the coverage of foreign material. One may suspect here an underlying assumption that all worthwhile national imprints will be purchased and that therefore their availability need not be questioned. There is usually no such wide coverage of foreign publications, and union catalogues are therefore necessary to identify holding libraries. The inability even of countries that have highly developed interlending systems to supply all national imprints has been made clear by recent studies in the United Kingdom and the Federal Republic of Germany (see Chapter 4). Archival collections do little to help general availability, though their existence will be necessary to guarantee the presence of national imprints within a country. A valuable extension of the location function of union catalogues is to be found in the German Democratic Republic, where the production of the Union catalogue of foreign periodicals and series is computerized. Various subsets can be produced that can enable librarians to rationalize the acquisition of foreign serials within the country as a whole.

Overall, union lists of serials are much more common than union catalogues of monographs. This may be partially explained by two factors. Firstly, in many countries the demand for serials exceeds that for monographs; and secondly, union lists of serials are more easily maintained as they require less frequent updating, and most demand will fall upon titles that are already listed. More union lists of serials than of monographs are therefore found in published form. Union catalogues of monographs tend to be larger and it is much more difficult to keep them up to date. They are therefore

seldom found in published form unless they relate to a particular period of past acquisitions. Countries in which published union catalogues are to be found include the United States of America, India, Australia and the United Kingdom; the availability in published form of the regional union catalogues of the Federal Republic of Germany is also being considered. Because of their size, many published union catalogues are in microform. Their value for interlending depends upon the currency of information and frequency of publication, and hence the proportion of demand for which they can cater. National and regional union catalogues, however, are normally unpublished and are housed in a national library or regional co-ordinating library; such is the case, for example, in Austria and Switzerland on a national level, and in the German Democratic Republic and the Federal Republic of Germany on a regional level. Such catalogues may or may not be allied to a lending stock. The national libraries of Austria and Switzerland both lend material from their own stocks, as do most national libraries, while the regional union catalogues of the German Democratic Republic and the Federal Republic of Germany merely identify locations. It has been suggested however that all the regional union catalogues of the Federal Republic of Germany should be allied to a lending stock to minimize delays. Union catalogues for particular subjects are to be found in a number of countries. There is a marked tendency for these to cover scientific, technical and medical fields, which again can be seen as a reflection of high demand, with the relatively high cost of these serials as perhaps a contributory factor.

Computer-held union catalogues exist in the United Kingdom (London and South Eastern Region), the USA (as part of the OCLC system[25]) and the Federal

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[25] Kilgour, Frederick G. Interlibrary loans on-line. Library journal (New York), vol.CIV, no.4, February 15, 1979, p.460-463.

Republic of Germany. Their use is growing, and it seems likely that they will supersede other union catalogue systems (card, printed, or microform) in many countries.

The relative importance of union catalogues in national interlending is difficult to establish. It is known that in the Federal Republic of Germany some 70% of requests are handled by the regional union catalogues and that a sizable proportion of direct interlending is facilitated by published union catalogues. It also appears that in the United Kingdom union catalogues are used, whether direct by libraries or by regional bureaux and the British Library Lending Division, for less than 22% of interlending.

5.2 Direct requesting

The second most commonly observable feature of current practice is direct requesting. It is highly probable that some interlending is conducted on such a basis in nearly all countries; its proportion will obviously vary according to other aspects of interlending practice prevailing within a country. In a system with centralized provision, individual libraries may approach the central loan collection directly, and the volume of direct requesting between individual libraries is likely to be relatively small. In the United Kingdom direct application accounts for some 16% of requests for interlibrary loans. At the other end of the scale, in countries that lack formal organization for interlending, the bulk of requests may be sent directly to libraries thought most likely to hold desired items. Published union catalogues facilitate direct requesting and in some countries, such as the Federal Republic of Germany, direct application to subject collections may be permissible. Alternatively, direct requesting may be limited to a particular sector, such as research libraries in Denmark and Norway. The quality and quantity of direct application are very difficult to assess, and its importance within a country with an organized system that handles the majority of requests is difficult to establish. Apart from the figure given above for the United Kingdom, it is known that some 30% of requests in the Federal Republic of Germany are sent directly to holding libraries through the use of published union catalogues, or are sent directly to subject collections, though access to these collections is also provided by the union catalogue of the region in which the subject collection is situated.

Requests may be sent by mail - still much the commonest method -, by Telex (a fairly common method in developed countries), or by computer The last method, which could well overtake Telex in the fairly near future, may be used between any two libraries that are linked by computer, but it acquires a

special significance when the union catalogue is accessible on-line, as in the case of the OCLC system.

5.3 Centralization

Some degree of centralization is also common to many countries. Centralization can take several forms, the commonest being the channelling of requests to one central institution that maintains an unpublished union

catalogue, as is the case in Switzerland and New Zealand, and to a lesser extent in Spain, Austria and a number of other countries. The degree of such centralization obviously depends upon the extent of coverage of the union catalogue. In some countries centralization may be for a particular category of document, such as foreign monographs in France. In certain countries, such as New Zealand, the central institution that maintains the national union catalogue will lend material from its own stocks, though this is often limited to material for which locations in other libraries cannot be found.

Alternatively, centralization may apply to the source of supply, as is the case for the majority of interlending in the United Kingdom. The British Library Lending Division receives 78% of all loan requests and supplies, directly or indirectly, 73% of all material sent on interlibrary loan. Even in such a highly centralized system, there is a network of regions, created in the 1930s, which maintain union catalogues, and union catalogues are also maintained at the British Library Lending Division to help locate material not available from its central stocks. While the United Kingdom provides the most prominent example of centralized provision, it may be seen in a limited form in those countries where a certain amount of material is lent from the central institution that maintains the national union catalogue. A closer approximation to the situation in the United Kingdom is to be found in France, which exhibits two forms of central supply - the Service Central des Prêts and the Centre de Documentation Scientifique et Technique of the Centre National de la Recherche Scientifique. The services of the latter, however, are allied to an abstracting service, and material is made available in the form of reproductions only; its service is therefore somewhat restricted by copyright requirements.

5.4 Regional organization

Regional organization is to be found in a number of countries. As in the Federal Republic of Germany, this may be due in part to the federal structure of a country, though, as noted, interlending on a regional basis also exists in the United Kingdom. Interlending regions may be coterminous with the areas designated for a system of regional legal deposit, as in Austria. Regions may maintain union catalogues, as in Yugoslavia, the German Democratic Republic and the Federal Republic of Germany, although this is no requirement of regional organization - not all of the regions of Austria maintain union catalogues. Whether regional systems have union catalogues or not, a co-ordinating library for the area is usually present. Such a co-ordinating library may maintain a loan stock, as is the case in Finland, although the interlibrary lending centres in Sweden do not maintain such collections. Regional organization may be limited to a particular sector of library provision, such as public libraries in Finland and the Netherlands.

5.5 Circulation of requests

The circulation of requests by means of a rota is also to be found in several countries. Requests from university libraries in France may be circulated to other university libraries, in an order that is predetermined by the requesting library, until satisfied. Alternatively, a request that has been checked against a union catalogue without finding any locations may then be circulated through the other regional union catalogues, as in the Federal Republic of Germany and the German Democratic Republic. Again, requests may have to be circulated through the various locations that have been identified by the union catalogues.

A rather different form of circulation is the loans circular

which is used in New Zealand. Here, instead of circulating requests through a number of libraries the bibliographical information is transferred to a list, after all the usual channels have been exhausted; the list is then circulated to a number of major libraries, which check for possible holdings.

5.6 Subject specialization

Subject specialization, which is rarely found in isolation within a country, may be planned as an element of interlending, either in the form of subject collections that are dedicated to interlending as in the Federal Republic of Germany, or as a result of co-operative acquisition schemes, as was the case in the United Kingdom. Alternatively it may occur by virtue of the nature of a particular research institution, as in Finland where an existing library in a particular field may be appointed as a national central library for that field and accept certain interlending responsibilities. It may be possible to approach such collections direct, as in the Federal Republic of Germany, or they may be built into a hierarchical system, as in Hungary, Sweden and Bulgaria. De facto subject specialization may exist in developing countries, where particular fields such as medicine or agriculture may be considered to be of prime importance, and may have benefited from particular development programmes, either as a matter of internal policy or with the assistance of foreign aid.

5.7 Hierarchical structure

Neither subject specialization nor hierarchical provision is limited to any one type of system, though, as in Bulgaria, the system itself may be a hierarchical one, in which requests are passed from an individual library to a central library, to a relevant subject collection and finally to the national library. Alternatively a hierarchical approach may be adopted for a particular sector of library provision, such as the public library sector

in Denmark and Sweden, or requests, having passed through a regional or rota system, may progress to a higher level of provision. If a request still cannot be satisfied, it may then be passed to the Deutsche Bücherei. Even in a highly centralized system such as is found in the United Kingdom, the term 'hierarchical' may be applied, in that requests may be passed from an individual library to the relevant regional bureau and thence to the British Library Lending Division.

5.8 Conclusions

Such are the main elements of interlending practice to be found in the countries described. No single feature is found in isolation in any country, and the relative importance attached to any one element will depend upon the efficiency of other elements of the system. Ideally all elements will combine to create the most efficient total system. In spite of the lack of detailed information, it may safely be stated that this is not the case in most countries.

All countries for which information is available have union catalogues, in some cases very extensive and in others very numerous. There is often some co-ordination, but it seems that by no means in all cases are all even of the most important union catalogues under one control, though where there is a national union catalogue it is often held by the national library. Little indication is given of the use made of union catalogues, let alone of their effectiveness or costs.

Most countries have a focus for interlending, but its role varies very widely. In some cases it serves mainly as a switching centre for international loan requests, and in others as the main point to which national

requests are directed. It may also have a co-ordinating function. It is often associated with the national library. It is not clear in most countries where responsibility for interlending - for planning, supervision and monitoring - resides, nor indeed whether such a responsibility is recognized. When it is assumed by the national library, it tends to be regarded as marginal to the central functions of serving as a national reference collection and national bibliographic service.

What libraries actually do when their clients require material that they do not have is rarely indicated. Nor is the success or speed with which their requests are met, nor the costs, to them or in total, of interlending. This is the most serious deficiency in the information available for the purposes of this report.

There seems to be a clear need for more, and better, descriptive studies of interlending in different countries. These studies should aim to provide a comprehensive picture rather than the glimpses of certain elements and aspects that have hitherto been most common in the literature; these glimpses certainly have their place, but they need to be seen in a total context. Such surveys as those recently undertaken in the United Kingdom[1] and the Federal Republic of Germany[2] may be mentioned as examples that might well be followed elsewhere.

1. Line, M B and Steemson, R J. Interlibrary lending in the United Kingdom: report of a national survey carried out in February 1977. London, British Library, 1978. 37 p. (British Library R & D Report no. 5417); Interlibrary lending in the United Kingdom: summary report of a national survey conducted in February 1977. Interlending review (Boston Spa), vol. VI, no. 2, April 1978, p. 31-38.

2. Zunker, Ernst. Die Ausstattung der Leihverkehrsregionen mit deutschsprachigen Monographien ab Erscheinungsjahr 1945. Berlin, Deutscher Bibliotheksverband, Arbeitsstelle für des Bibliothekswesen, 1977. (Bibliotheksdienst (Berlin), Beiheft 126). 54 p.

6. MODELS OF NATIONAL INTERLENDING SYSTEMS

It was hoped at the outset of this study that models could be identified from an examination of existing interlending systems, or that existing systems could be used to illustrate models. It is evident from the previous chapter that remarkably little is known of the operation of interlending in most countries, and that, as pointed out in the Introduction, very few countries can be said to have interlending 'systems'. In this situation, the most useful approach seemed to be to identify possible models on the basis of the analysis presented in the preceding chapters, adducing evidence from existing systems as available and appropriate.

The possible range of potential models is very large; the more so because different models may be constructed for different forms of material such as monographs and serials, or even for different subjects. Our approach here is to outline several basic and combined models in terms of perhaps the most important factor, and then to consider other major factors relevant to the design of interlending systems. Mathematical modelling has not been attempted; the number of factors involved is large, and their relationship is very complex; more important, some of the most significant factors (eg. political, geographical and administrative) cannot be measured in any meaningful way, and any general model constructed on a foundation of arbitrary values would be basically unsound. This is not to say that, within a given country, and with various basic factors known, modelling techniques could not then be usefully applied, though even then it is often difficult to attach values to certain essential parameters. Simple models[1] may

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1. Arms, William Y. Models for interlibrary lending. Interlending review (Boston Spa), vol.VII, no.4, October 1979, p.130-136.

prove as useful for practical purposes as complex ones.[2] The greatest value of modelling techniques may well be in limited aspects of interlending, eg. in determining duplication policies or in designing union catalogues.[3,4]

There are several basic factors to be borne in mind:

1. Degree of centralization. The provision of material may be more or less centralized, and so may the mode of access to material; these two aspects interact to some extent but have a certain interdependence.

2. National or regional (sub-national). The extent to which the system is designed as a single national system or on the basis of regional systems (or state systems in the case of some federal countries).

3. Hierarchical nature. A system may be designed on a monolithic or hierarchical basis; hierarchy of provision and hierarchy of mode of access are obviously closely linked.

4. Unity of provision to all libraries. All types of library may be served by a single system, or by different systems, which may or may not be linked.

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2. Rouse, William B. A library network model. Journal of the American Society for Information Science (Washington), vol.XXI, no. 2, March-April, 1976, p.88-99.

3. Buckland, Michael R. The quantitative evaluation of regional union catalogues. Journal of documentation (London), vol. XXIII, no. 1, March 1977, p.20-27.

4. Arms, W.Y. Duplication in union catalogues. Journal of documentation (London), vol.XXIX, no. 4, December 1973, p.373-379.

5. Unity of provision for all types of literature. Literature may be provided by a single system or by different systems: possible divisions are by subject, language, date, or form.

Each of these is discussed in turn. Because of its fundamental importance, the degree of centralization of provision is used in constructing the basic models, and the other factors are then considered. To aid clarity and avoid constant cross-references, some points are repeated under different factors when it is necessary to consider them from a different angle.

6.1 Degree of centralization

6.1 a. Centralization of provision

Total centralization of provision - the provision of all required material in one single collection - is unattainable, if only because the literature of the past could not be gathered in such a collection. Total decentralization - all libraries playing a more or less equal part in interlending - is equally impossible, because libraries are very unequal in the collections they have. We therefore consider various degrees of centralization and decentralization between these extremes, and the general bias of the system towards or against centralization. Four levels of concentration may be identified, although even these are unlikely to exist in their pure form, and, as will be seen, they constitute a continuum rather than clearly distinct entities, and in practice systems will approximate to composite models, which are also discussed. Since the four levels of concentration constitute basic models, which will be used later as reference points, they are called here A, B, C & D.

Model A. Concentration on a single library

The concept here is of a single collection on which interlending demand is concentrated. Such a collection may be dedicated solely to interlending, serving this and no other purpose, or may share the interlending function with other functions.

A dedicated lending collection would almost certainly have to be mainly built up specifically for the purpose, unless an existing large library were willing and able to surrender its present functions; but it could draw on some of the resources of other libraries in order to build up a collection, especially of older material. Once built up, it could serve as a repository to which material withdrawn voluntarily by other libraries (eg for lack of space) could be sent, so that its collections would gradually be enriched. A shared library would be one, perhaps a national library,[5] that combined lending to other libraries with a service to its own clients. The attraction of this solution is that resources do not have to be duplicated to the same extent as if a dedicated collection were set up. The danger is that the two functions may conflict, so that either or both will suffer; since the local clients are likely to demand an adequate service, the interlending service is the more likely to suffer. The conflict that can arise because the same items are wanted at the same time by local clients and by other libraries can be largely resolved by the use of photocopies wherever possible in place of loans, and by adequate duplication of the most wanted items - an easier task for

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5. Urquhart, D.J. National lending/reference libraries or libraries of first resort. BLL review (Boston Spa), vol IV, no. 1, January 1976, pp.7-10.

serials than for single publications such as monographs. The problem may in any case be little more serious than that of providing sufficient copies of wanted items to serve local clients.

More fundamental may be a conflict of systems; a library geared to serve local clients may not be geared to give a fast service to other libraries, especially if much of its collection is on open access and in subject order. For example, some of the methods used at the British Library Lending Division, such as the shelving of most items in alphabetical order by title for fast direct retrieval and the binding of serial issues individually rather than in volumes to ease photocopying and save postage costs, would not be appropriate in most university libraries. One solution to this difficulty, which is attractive for other obvious reasons, is to combine national lending with national reference functions. Much, probably most, of the national reference collection will be on closed access, and the retrieval of material from closed stacks to serve local readers is no different from its retrieval to serve distant readers; the only difference is in the mode of supply. The obvious disadvantages are that items sent to remote readers are likely to be away a few weeks before they return to the shelves, and it is difficult to retrieve them quickly meanwhile; and that loss or damage may occur. Against this must be set the fact that in most countries most potential users of the national collection are not within such easy reach of it, so that for them regular consultation is not possible; and that the readers who could obtain items from it on interlibrary loan would otherwise either have to travel to it, often at considerable cost and inconvenience, or, worse, fail to obtain the items at all. Since the aim of a

national library is to serve the nation's readers as well as to preserve the national archive, a strong case can be made for serving remote as well as nearby readers as part of the library's main role rather than as an occasional peripheral activity.

Provision can be centralized or concentrated on a single library up to varying levels of satisfaction. At one extreme, a library like the Center for Research Libraries in the USA can aim to hold material that other libraries do not buy or that they discard, so that the percentage of interlending demand with which it can deal is very small. This may be called residual centralization. At the other extreme, the British Library Lending Division may aim at very high levels of satisfaction - over 80% - from its own stock. (A distinction must be made here between the proportion of demand that a library <u>can</u> satisfy, the proportion of <u>actual demand on it</u> that it <u>does</u> satisfy, and the proportion of <u>total demand in the country</u> that it handles and satisfies. In the case of the British Library Lending Division, it <u>does satisfy</u> 83.5% of actual demand on it; it <u>handles</u> 78%, and <u>supplies from its own stock</u> 70% of all interlending requests in the UK. Thus, a collection may be <u>capable</u> of satisfying a considerably higher proportion of demand in a country than it is actually <u>required</u> to do). There is no reason why a central collection should not aim at lower levels than 80%, or at different levels for different kinds of material - say 80% for serials and 50% for monographs. This question of the relation of a central collection to other sources of supply is further considered below.

If there is a central collection. various criteria can be used to determine which categories of material should be acquired.[6] Extent of demand is one: the greater the demand, the lower unit costs will be. Availability elsewhere - in other libraries in the same country, or possibly in neighbouring countries - is another important criterion: the central acquisition of materials in low demand can save other libraries from having to acquire them to satisfy the very occasional need, and ensure provision of some items that would not otherwise be acquired at all in the country. Conversely, ready availability elsewhere may reduce the need for central provision. Desired speed of access is a third criteria: the faster the access needed (eg for scientific and technical journals) the stronger the case for central provision. Finally, cost of acquisition is an obvious factor. Different categories of material can be graded on these criteria to aid decision. It is most unlikely that any category will be in heavy demand, be readily available elsewhere, be wanted quickly and cost little to acquire; most often there will be conflict between the ratings on different criteria. A value judgment will in the end be inescapable, but a close analysis of the issues can aid decision. For example, materials that were requested a great deal and wanted quickly would probably be a higher priority, even though they were available elsewhere and expensive to acquire, than materials that were cheap and in moderate demand but available elsewhere and not wanted urgently; while materials in low demand that were expensive and not wanted quickly might not be strong candidates for purchase even though they were unavailable otherwise.

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6 Line, Maurice B. Criteria for selecting material for a central lending stock. Interlending review (Boston Spa), vol.VII, no.4, October 1979, p.126-129.

The size of central collections will depend partly on the base from which they start (eg. they may inherit another collection), partly on the older literature they are able to acquire as other libraries dispose of it, but mainly on the scale of current acquisition as determined by the satisfaction level set as an aim. It seems likely that 90% of interlending demand for serials can be met by between 8,000 and 9,000 titles and 80% by between 5,000 and 6,000 titles. It also seems quite probable that lists of 'core' titles, up to, say, 2,000 or 3,000, do not differ greatly between different countries; if this is so, a general 'core' list could form an invaluable planning tool. Both the size and the contents of 'core' lists in selected countries deserve study.

The number of monographs required to reach such satisfaction levels is much harder to determine, largely because advance identification of titles that will be requested is extremely difficult, so that it is necessary to acquire many items that may never be wanted in order to make sure that most of those that will be wanted are acquired. Perhaps an intake of around 100,000 monographs a year might be sufficient to satisfy 80% of demand, but this figure is the roughest approximation.

Central loan collections must be very carefully located to minimize costs and times of transmission, both of requests and of items requested. If they are shared with existing national reference collections, there will probably be no choice of location, but combined national reference/loan collections built up from scratch, eg. in developing countries, should be sited so as to serve as fully as possible loan as well as reference needs.

Dedicated (though not shared) loan collections can, by being specifically designed for interlending, achieve great economies - not only economies of scale, but economies of operation, for example by using simplified cataloguing methods (the catalogues, unless published, are used only by staff and no classification or other form of subject analysis is required).

Whether or not other provision is concentrated on a single library, it is the obvious way of making proper provision for the supply of national imprints on interlibrary loan. This may be most easily achieved if legal deposit of an extra copy of each publication in the collection is required. To ensure such provision in any other way would be very difficult.

Before a comprehensive central collection is seriously considered, it should be established whether or not such collections exist in neighbouring or other countries from which a fast and efficient service can be obtained. Much or most of a truly comprehensive collection will receive very little use and it would be very wasteful to duplicate such material if ready access to it can be obtained.

The advantages of concentration of provision on a single library are considerable, as can be seen from the numerous ways in which they can improve interlending (see Chapter 7). The main advantages can be summarized as follows:

1. It offers a single channel to which most or many requests can be sent, thus simplifying procedures and saving transmission costs.
2. It can match provision to demand fairly easily, because it is a main recipient of requests and can monitor its performance.

3. It can provide marginal material fairly easily.

4. The provision of national imprints can be more easily ensured.

5. It can be organized specifically for interlending, or at least for fast retrieval and supply of specific items.

6. Direct costs of handling requests are low because of economies of scale and because special procedures can be devised.

7. It is economical for libraries to use.

The main disadvantages of concentration on a single library are:

1. The costs of setting up and maintaining central collection - stock, buildings, staff, equipment, etc. - are high (but are greatly reduced if shared with reference collection).

2. Unit costs are high unless demand is heavy.

3. Any future failure to finance it adequately could undermine the whole system of interlending.

4. This is some risk of damage to central collection (eg. by fire).

5. There may be danger of abuse of a monopoly position (eg. imposition of high charges).

6. Excessive, perhaps 'unnecessary', demand, may be unleashed as a result of a fast and efficient service (this should however be reduced by local screening of requests, and by the costs of inter-library borrowing).

Model B. Concentration on a few libraries

In many countries, a high proportion of all the works (titles rather than copies) that are held in the country's libraries

are contained in a few or very few libraries. For example, in Denmark the Royal Library, the State and University Library at Aarhus, and the Danish Technical Library between them must

hold a very high proportion of all publications in Denmark, including all Danish imprints and perhaps 15,000 different serials - enough to satisfy well over 90% of all demand for serials if, as would be expected, they include those most in demand. Many other countries must have a similar situation. It is most likely to be most favourable where there is some differentiation between the libraries in question, for example if one concentrates on the humanities, another on science and technology, and a third on medicine. With three large general libraries, there will probably be a large overlap in holdings, in which case one of the libraries will need to serve as the main channel for requests (distributing them where necessary to the other libraries); and also the total provision may be less complete.

Concentration of this kind has the great advantage that it does not require the establishment of a dedicated collection, but only the adjustment of routines in the selected libraries to enable them to give a remote lending service. The extent of the adjustment that may be needed should not however be underestimated. There may be a severe conflict with service to local clients unless serious efforts are made (for example) to duplicate items where necessary and to provide adequate photocopying, packing and dispatch facilities. It is easier to supply serials with such a system, because most requests can be satisfied with photocopies, than monographs and other material which usually has to be lent. It should however be noted that up to 20% of serials requested may not be amenable to photocopying, whether because a whole issue is required (it may for example be devoted to a single topic) or because the the illustrations do not lend themselves easily to reproduction.

Although the present holdings and intake of selected libraries may be adequate to give a good service, the service could in many cases be improved by concerted efforts to fill gaps in the collections, as well as to duplicate where required, and for this extra money is required. However, the sums involved are small compared with those associated with single dedicated loan collections.

A greater problem is that of financing the lending service: the costs of checking requests against catalogues, retrieving items from shelves and possibly photocopying them, packing them and posting them; not to mention the unpacking and reshelving of returned loans. The costs of these operations, even in an efficiently organized system, will be considerable.* It would seem quite unreasonable to expect the libraries in question to bear such costs and provide an efficient service, and the cost should therefore be reimbursed, whether from central government funds, from transaction fees, from annual subscriptions by user libraries, or by a combination of these methods.

Both the advantages and disadvantages of concentration on a few libraries are less than those of Model A, concentration on a single library; costs and dangers are less, but so is effectiveness.

For such a system to be effective, strong central planning and coordination are essential. This can easily be achieved if one of the libraries involved is the national library. In any case,

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* In the UK, at 1980 prices, around £1.50 for photocopies and £2.00 for loans.

as was pointed out at the beginning of this chapter, total centralization is unattainable, and the level of satisfaction aimed at may be no higher than 60% or 70%. Access is therefore necessary to the resources of other libraries, and since this too must be planned the same control mechanism should serve for both.

There are virtually no examples of this model at present, although some countries have systems that approach it.

Model C. Planned decentralization

Decentralization can be planned or unplanned; in the latter case, access may simply be provided to the existing resources of other libraries, whose collections are designed to serve their own clients. This is considered in the next subsection.

Planned decentralization can take several forms, but their common feature is that the provision of material is allocated to some extent between libraries on a more or less systematic basis. In some countries, notably the Federal Republic of Germany, strong subject libraries may be set up (or existing strengths enhanced), and interlending stated as one of their functions so that interlibrary loan requests can be sent direct to such libraries with a fair or high probability of success. If there are only three or four such libraries, they will conform to Model B above; in most cases, however, there will be many more, perhaps (as in the Federal Republic of Germany) organized on a hierarchical basis.

The advantages of such a system are:

1. Many or most requests can be sent direct.
2. Extensive resources can be developed that will serve local subject specialists as well as national needs.
3. Additional costs of provision are not high.

Disadvantages include:

1. The total national costs in such a system may be high because of the extensive duplication that is likely to occur among the special subject libraries themselves and, even more, between them and other research libraries.
2. Conflict may arise between lending and other functions.
3. Procedures have to be adjusted to give an efficient lending service.

An alternative kind of planned decentralization is the superimposition of specialization on general libraries, which are expected to acquire additional items within prescribed limits. Cooperative acquisition schemes may take the form of allocating the whole field of knowledge on a subject basis among libraries, as is attempted for British monographs in one or two of the regional library systems in the United Kingdom; or, perhaps more rationally, general libraries with special subject strengths may be required to build on them. Other bases of allocation are by authors' names and their place in the alphabet, by language, by country of publication, or by date (partial examples of all four exist in the United Kingdom).

The major disadvantage of superimposed specialization is that it requires libraries to buy material that they do not need for their clients. It is therefore very vulnerable at times of financial stringency, and indeed many such schemes have weakened or died during such times. It is true that special financial support can be sought to buy the extra books, but in that case

it would be more economical to use the money to add the books to a central collection. Another disadvantage is that permanent retention of items so acquired is difficult to ensure, even if they are separately stored.

A further difficulty is that of ensuring that all the libraries holding the material in question are able to supply it quickly on interlibrary loan, when interlibrary lending will form only a very small part of their operations. Finally, requests have to be directed to a large number of libraries.

So far as can be seen from the scanty evidence, interlending systems based on cooperative acquisition schemes do not have a very good record, either in the proportion of requests satisfied or, particularly, in speed of supply.

Model D. Unplanned decentralization

Most existing 'systems' are basically of this nature; that is, the libraries in the country are taken as they are, without any special attempt at subject or other specialization, and their resources are made available to other libraries by means of union catalogues. The rationale of such a system is obvious. No additional resources of provision are required, all or most libraries in the country are voluntarily involved in a cooperative activity, and between them it is probable that they will hold a high or fairly high proportion of all items wanted on interlibrary loan.

The disadvantages are equally clear. Unplanned decentralization cannot ensure that less common documents are acquired, so that provision is almost certain to be very incomplete. Even if

additional resources of provision were not needed, substantial resources are necessary to construct and maintain the union catalogues on which the whole system depends. To achieve the active and continuing cooperation of a large number of libraries is difficult. The accuracy, and therefore the usefulness, of union catalogues depend on the conscientiousness of libraries in reporting, quickly, not only new acquisitions but also losses and withdrawals. Although the most commonly requested items are fairly certain to be held by at least one of the cooperating libraries, it is highly unlikely that all cooperating libraries will, or can, give a fast and efficient service. Libraries that receive a large number of requests may be able to justify the employment of a full-time assistant, but extra staff have to be paid for; and most libraries will not receive nearly enough requests to justify special staff. Conflict with the service to local clients is difficult to avoid; it can be reduced if serials are not lent out, but available only for consultation or by photocopies of required articles, but not all serial requests can be met with photocopies, and libraries can hardly be expected to adjust their loan policies for the purpose of interlending. There is no way of ensuring that provision matches demand, or even of finding out easily whether it does or not. The hidden costs are therefore high, and the effectiveness likely to be low. The distribution of requests is bound to be very uneven, and overload on a small number of the largest libraries is likely to occur, as has indeed occurred in the USA. Indeed, unplanned decentralization may result in unplanned concentration on a few libraries.

A new dimension, and indeed new life, have however been added to decentralization by the development of on-line access to

computer-held union catalogues. These have several advantages The union catalogue itself is more easily kept up to date with new entries, and if it is part of a system used also for cataloguing, as is the case with OCLC, records for new books and locations can appear in the data base very quickly. Locations can be positively identified with relative ease, and indeed the data base can be used instead of printed bibliographies to check references. Direct transmission of requests by computer can be built into the system, using the records already in the data base so that little or no additional typing is needed. On-line response in the case of delay on inability to supply is possible, and requests can then be switched quickly to other locations. Recalls can be similarly sent on-line. Analyses of demand and performance can easily be carried out, and the results used to modify the system if necessary. Less obviously, on-line union catalogue systems permit the load of interlending to be spread more evenly; this can be achieved by deliberate decision on the part of requesting libraries, or more subtly, when there is a choice of locations, by first displaying those that receive least use.

In these ways on-line union catalogues can make the most of existing resources while minimising many of the weaknesses of decentralized systems. They do not however increase the total provision of material, unless the same on-line system is used also for cooperative acquisition, possibly by filling gaps identified by unsatisfied demand; nor do they increase the ability or willingness of libraries to supply requested items, except perhaps that the greater spread of requests among locations

may encourage cooperation. There is no reason why speed of actual supply should be greater than with ordinary decentralized systems.

There are grounds for believing that the good performance achieved by the OCLC system (around 90% satisfaction rate, with 50% of requests fulfilled within 10 days of requesting), which may perhaps be termed planned access to unplanned decentralization, may not be paralleled in other countries. The USA has a large number of very good libraries, and a much larger number still of good libraries. As a result, not only is book provision extensive, but the chance of conflict between interlibrary loan demand and the needs of local users is relatively small, and there is a good possibility of spreading requests and so avoiding concentration of demand on a few libraries. These conditions are unlikely to obtain elsewhere to the same extent, but only practical experience will show. It should also be noted that some of the improvements offered by computer technology, namely on-line checking and requesting, notification of delay or failure to supply, and recalls, and analyses of demand and performance, apply equally to centralized systems.

In a modified form of Model D, which presupposes a certain amount of planning, those libraries that contain few or no unique items can be excluded, so that the number of cooperating libraries may be reduced to a manageable number. This may be especially desirable when this model is used to support Model A or B.

Composite models of provision

As explained above, even a very high degree of centralization cannot by itself achieve an ideal performance, because all required publications of the past cannot be acquired, and also because totally comprehensive coverage of current acquisitions is unattainable. Except in countries with virtually no existing libraries at all, there are bound to be other libraries that hold both past and current publications not held by the central collection. The same applies to Model B, in which provision is concentrated on a few libraries.

Centralized systems must therefore be supported by other systems, on the lines of Models C or D. Models C or D can exist without support by Models A or B, but they may support one another. There are various possible combinations, even if the question of different provision for different kinds of material is ignored. The main combinations are as follows:

Model AC. Single library supported by planned decentralization

The concentrated collection could be supported in different subject fields by specialized collections, or could leave provision in certain specialized areas entirely to specific libraries (as, in the United Kingdom, the British Library Lending Division at present leaves the loan provision of monographs in oriental

languages to the School of Oriental and African Studies in the University of London). If however the central collection is effective for a high proportion of requests, it is questionable whether the supporting system needs to be planned, or whether unplanned decentralization cannot give adequate support.

Model AD. Single library supported by unplanned decentralization

The concentrated collection could be supported by access to unspecialized libraries, possibly selected as having resources in which the central collection is less strong. (The British Library Lending Division, which acquires relatively few foreign language monographs systematically, maintains union catalogues of the foreign language monographs acquired by about 70 selected libraries). A central collection backed by on-line access to other libraries (or vice versa) would be a very powerful and effective combination.

Model ACD. Single library supported by both planned and unplanned decentralization

As the two examples above show, both kinds of support are used by the British Library Lending Division.

Model BC. Few libraries supported by planned decentralization

Similar to AC above.

Model BD. Few libraries supported by unplanned decentralization

Similar to AD above.

Model BCD. Few libraries supported by both planned and unplanned decentralization

Similar to ACD above.

Model CD. Planned decentralization combined with unplanned decentralization

Subject or other specialization schemes could be combined with access to other libraries not involved in such schemes; either type of decentralized provision could be the basic system that was supported by the other, or they could be loosely coordinated.

All of the above combinations assume some form of planning. In most countries at present, various kinds of provision coexist, without any prior planning and without much current coordination.

6.1 b. Centralization of access

Access to resources can be mainly centralized, partly centralized, or entirely decentralized.

i. Centralization of access can be achieved only with a national interlending centre to which many or most requests can be directed. If a central loan collection is maintained and there is a very high probability that requests will be satisfied from stock, no catalogues need to be consulted before requests are despatched. Indeed, if the collection were very comprehensive, access to the holdings of other libraries might be so rarely needed as not to be worth providing, but this is unlikely to be the case.

Even where a loan centre does not have a large collection, it can still serve as the principal channel for the receipt of requests if it maintains the main union catalogues of the holdings of other libraries, and if these catalogues are unpublished. It can then either redirect the requests to

the libraries listed as holding them, or return them to the requesting library marked with locations, to which application can then be made direct. The latter alternative combines centralized and decentralized access for the same requests. It is apparently slower, but gives the requesting library much more control over the progress of its requests, including the ability to pursue urgent requests by special means.

One strong argument for centralization of access is that it permits routine monitoring of requests. This is important if deficiencies in the system are to be detected, and is very difficult to achieve with decentralized access.

ii. Partly centralized access can be achieved with Model B, whereby provision is concentrated on two or three libraries to which requests can be sent direct. Alternatively, one of the libraries in question can receive all requests and transmit where appropriate to the others.

iii. Decentralized access is necessary with Models C and D unless a national interlending centre maintains unpublished union catalogues and requests are sent there. With Model C, planned decentralized provision, it would be more usual to send most requests direct to the specializing library. If the allocation of provision is precise enough, union catalogues may be unnecessary or reduced to a supporting role.

With Model D, union catalogues are essential. As explained above, these may be maintained by a centre to which all requests are

sent. Alternatives are published union catalogues which enable libraries to send requests direct to locations listed; and on-line access to computerized union catalogues, which can achieve the same result.

Union catalogues may thus perform a small supporting role to a central lending collection, in which case they may contain the holdings (possibly selected) of a limited number of selected libraries; or they may be maintained in unpublished form by a centre; or they may be published; or they may, if automated, be consulted on-line.

Published union catalogues can be very expensive. Frequent publication of a complete updated catalogue is likely to be prohibitively costly. The issue of supplements can alleviate this problem, at the expense of ease of consultation. If publication is infrequent, its value declines because many wanted items will not be found in it. Published catalogues can of course be produced from computer files which are continuously updated; this method makes more frequent publication (possibly on Computer Output Microform) possible than with manual systems, and also makes it possible to consult on-line the entries added since the last published issue. The prime current example of a computerized interlending system is the OCLC system. A further refinement possible with automated systems is the recording of items by standard book number; the published catalogue need then contain only ISBN and location codes, and the cost of maintenance and publication is dramatically reduced, although some of the costs are transferred to borrowing libraries, which have to identify the ISBNs of wanted items. Examples of ISBN lists are

the regional union lists in the United Kingdom and the index of post-1974 material in the libraries of Hessen in the Federal Republic of Germany.

Most interlending systems will probably use different approaches for different forms of material. Serials lend themselves more

readily to published union catalogues, which will become out of date less frequently than union catalogues of monographs because most recent volumes wanted will belong to serials that started some years ago and are therefore recorded in the lists. However, since it is much easier to set up central lending collections for serials, union catalogues may be less necessary, or they can be reduced to a minimal supporting role. Union catalogues of monographs are both more necessary and less easy to maintain.

One major problem with union catalogues, apart from their cost, is that they are soon out of date, not merely because new entries have not been recorded but because entries for lost or discarded books have not been withdrawn. Automation can aid speedy recording by entering items into the file quickly, but the removal of dead entries and locations is mainly in the hands of cooperating libraries.

A different problem with union catalogues is that unless there is strong central control, they can proliferate in an uncoordinated way, with overlap in contents, undesirable gaps, confusion on the part of contributing libraries and, above all, difficulty and waste of time for user libraries, both in selecting which catalogues to search and in having to search several, probably with rather different styles of entry and filing. There may be good reasons for separate union catalogues, for example for books published before a certain date (which may require fuller entries), for items in oriental languages, or in small localities in which same-day access is possible. However, there should be as few catalogues as possible, and these should all be <u>planned,</u>

rather than allowed to develop independently, with standard forms of entry and with the overall aim of facilitating both the contribution of entries by cooperating libraries and consultation by user libraries.

Where requests are checked against union catalogues, and hence where the costs of checking are incurred, depends of course on whether the union catalogues are published or not. Unpublished union catalogues transfer checking costs from local libraries to a centre, but they may slightly reduce these costs because the staff of the centre will have greater familiarity with the catalogues.

If the centre that holds the main union catalogues has a central loan stock, requests for appropriate material should be directed there first, to maximize use of the stock. When the union catalogues are unpublished, this is hardly avoidable; a similar result can be attempted by means of published or on-line catalogues if the loan stock copy always appears first in the holdings recorded.

It was argued earlier that centralized access permitted routine monitoring of requests, and that such monitoring was difficult to achieve otherwise. However, with on-line requesting systems, by which requests are transmitted on-line to libraries identified as locations, it would be possible for the computer to record the requests and perhaps even whether or not they were satisfied, thus providing automatic monitoring. For this to be effective, however, all or most libraries would need to be on-line to one another, and this seems at present a rather distant prospect.

6.2 National or regional (sub-national)

Lending systems can be organized as single national systems, or on a regional basis within the country, with each region having its own more or less independent system. Regional systems may be considered appropriate in several circumstances:

a) In a country with a federal constitution, which gives each state or province a great deal of autonomy (eg Federal Republic of Germany).

b) In a very large country with problems of communication over long distances, so that regional schemes may reduce supply times. However, the difference is unlikely to be more than a day or two unless communications are very bad, nor are savings due to proximity likely to approach the costs of operating several schemes rather than one.

c) In a country where loss rates in transmission are significant, and alternative and more secure means of transport are sought. In such cases local interlending systems, making the use of road transport possible, are more likely to reduce the problem than systems based on large regions.

d) In a country where different languages or cultures exist in different regions; an example is Yugoslavia.

e) In a country where the volume of interlending demand is very high, and library provision is plentiful. There may be a fear of overload on a single system, and the probability that interloan requests will be satisfied within a region is high. The USA is such a country; there are numerous interlending schemes within states (eg. NYSILL, MINITEX) and in regions.

In some countries, two or three of these considerations apply; the USA, for example, is a very large federal country with a high volume of demand and plentiful library provision.

Political factors may well override other considerations, but it would appear that where regional systems do not already exist, a very strong case would need to be made for establishing them, especially in developing countries where resources are scarce. The probability of requests being satisfied within a region is unlikely to be very high, and the constant movement of requests between regions is time-consuming and uneconomic. There is also bound to be considerable duplication of resources between regions; some of this may be reasonable and indeed desirable, but some will be wasteful and divert money that could be spent on additional resources.

Regional decentralized systems require union catalogues. If these are not integrated also in a national catalogue, locating items at the national level is time-consuming; while if they are integrated, very strong central control is required to ensure that duplicate entries are submitted by libraries or passed on by regional union catalogues.

Where regional systems do exist, their relationship to one another and to any nationwide system has to be considered. Coordination between regional systems can, if strong enough, help to reduce unnecessary duplication and increase the total resources available, but the problems of maintaining such coordination are severe and the costs may be high. Where there is also a national system as well, it can act as a backstop, dealing with the requests that the regional systems cannot supply (see 6.3, Hierarchical nature). Alternatively, some kinds of requests (eg. for common, recent or native publications) may go to regional systems and some direct to the national system. Much must depend on the reasons why regional systems exist at all; where, for example, there are separate cultures and languages regional systems may operate more

or less autonomously.

No decision should be made to set up a national lending system on the basis of regional systems until the relevant factors have been carefully studied: the relative costs of provision and of access, the relative satisfaction levels, and the relative speeds of supply. A study of the volume, nature and geographical distribution of demand should be carried out as part of this analysis.

6.3 Hierarchical nature

There can be hierarchy of provision, and hierarchy of access; the two are closely related. Hierarchical provision can take several forms, with a national lending collection either at the apex or at the base. Thus, a national lending collection can be comprehensive, or cater only for demand that cannot be satisfied by, say, regional collections aiming to satisfy a given percentage of regional demand. Since, for example, a residual national collection would be used as a last resort after regional collections or systems, or whatever other systems existed to take the bulk of demand, hierarchy of access would be implicit in this particular form of hierarchical provision. A comprehensive national lending collection, however, could be used either as a first resort or a last resort; and since the decision affects radically the use made of other parts of the system, and of course of the national collection itself, the whole system should be planned in the light of this decision. A decision that the national collection should be used as a first resort may mean that the remaining parts of the system have a merely supportive role; if on the other hand it is to be used as a last resort, the other parts must be robust enough to carry the majority of loan demands.

It should be noted that provision can be multi-level without being hierarchical. A hierarchy implies a pyramid; in a multi-level system levels can be of the same or varying sizes, and the shape of the whole system may not be important. Thus a country can have a central loan collection and regional systems and an unplanned decentralized system coexisting but not hierarchically related. This was the position in the United Kingdom until a few years ago, and still is to a large extent, although the existence and growth of the upper level of the central collection have led to changes in the other systems in the direction of a hierarchy.

An interesting recent (or rather, future) example of a hierarchical provision and access system is the US plan for a National Periodicals Center and its place in the total system.[7,8] The plan was for the loan collection to be as comprehensive as possible, and to serve as second, or intermediate, resource between local (regional) or state systems (first resort) and major archival collection (last resort). This order of access could obviously be varied, with the national collection as either first or, much less satisfactorily, last resort. The plan in any case seems likely now to be modified somewhat.[9]

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7 National Commission on Libraries and Information Science. Task Force on a National Periodicals System. Effective access to the periodical literature: a national program. Washington, DC., NCLIS, 1977. viii, 92p.

8 Council on Library Resources, Inc. A national periodicals center: technical development plan, Washington, DC., Council on Library Resources, 1978. xv, 255p.

9 Little, Arthur D., Inc. A Comparative evaluation of alternative systems for effective access to periodical literature. Washington, D.C., National Commission on Libraries and Information Science, 1979. Various paginations.

A rigid hierarchy of access, in which requests have to go through various levels in a prescribed order, can be slow because many requests may not be met at the first level. This applies particularly if the first level is the 'lowest' rather than the 'highest' - a situation that can occur when the 'lowest' is, or appears to be, faster. The words 'appears to be' were added deliberately. Whether the cost is in fact lower depends not only on the relative cost per request at each level, but on the proportion of requests that have to be passed to higher levels, since these incur costs that may be almost double. The same applies to speed; even if the lower level is

in fact faster when it is successful, the average speed may be less if more than a certain proportion of requests have to be passed to the higher levels. (It may nevertheless be decided as a matter of policy that fast satisfaction for many and slow satisfaction for some is better than medium-speed satisfaction for all). The best solution is probably to have a recognized hierarchy of access which is not rigidly imposed, so that libraries can bypass 'first' levels to gain access to upper levels where higher probability of satisfaction or higher speed is important.

Where there is a dedicated central loan collection, it is probably wise to use it as the first resort in nearly all cases, because it is or should be uniquely geared to give a fast service, and because the heavy costs of central loan provision can be better justified if the volume of demand received is high (thus giving low unit costs). The decision is less easy with central loan collections that are combined with a national reference collection, or when provision is concentrated on a few libraries. Because they have other, and probably prior, responsibilities, it would seem wiser to use them as second or third resorts. However, if they do not normally lend out journals to their own users they should be able to discharge adequately both reference and lending responsibilities for journals by photocopying; and where loans are unavoidable, as in the case of most monographs, carefully planned duplication will alleviate the problem. Much will depend on the total volume of demand.

6.4 Unity of provision to all libraries.

Interlending systems can be designed to serve only one or two kinds of library, or to be available to all. It is not uncommon for public and academic libraries to have separate systems; this is the case in Sweden, for example. There may be administrative reasons for this;

for example, academic and public libraries may be funded from different parts of the public purse, or one category of library may be publicly funded and not the other. Another reason may be that libraries of the same kind are likely to be able to serve one another better than libraries of different kinds; even where there is a single system, books wanted by public libraries tend to be borrowed from public libraries, and so on. There may be a fear that any published union catalogue could become excessively large if it included a large amount of low-level* material such as many public libraries are bound to have; also, academic libraries are much less likely to discard material than public libraries, so that a union catalogue of the contents of academic libraries has a greater permanence. Further, academic libraries may be more cautious about lending material for the use of non-academic readers.

Whether any or all of these reasons are sufficient to justify separate systems is open to doubt. Where separate systems exist, it is essential that links should exist between them, since while it may be true that most books wanted by academic readers are likely to be found in other academic libraries, simply <u>because</u> of the general similarity between their contents recourse will often be necessary to other types of library. Switching requests between systems causes further delay, especially if the systems are organized in different ways. Links can be achieved either through centres for each system, or simply by the requesting library turning to the other system when its own fails.

It is noteworthy that while academic and public libraries sometimes have separate interlending systems, special libraries rarely have,

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* 'Level' is used not as a measure of value or ultimate worth, but of research or academic interest.

except sometimes on a very local basis. So far as the meagre data allow any judgment to be made, special libraries in many countries (though certainly not in the UK) appear to account for a remarkably small proportion of interlibrary loan demand - remarkable because many of these libraries are very small and cannot possibly approach self-sufficiency. It seems probable that, as in the USA, many of them rely heavily on local academic libraries, which may act as agents in sending on requests they cannot themselves satisfy.

With unplanned decentralized interlending systems, some division between different types of library may be understandable, if only to avoid excessively bulky union catalogues. Otherwise, although there may be good historical reasons for separate systems, there would seem to be no very good case for setting up such systems deliberately; it is hard to see any advantages in doing so, and inevitably there will be much avoidable overlap of provision. Certainly it would be very hard to justify either separate central loan collections or separate systems of concentration on a few libraries.

With planned decentralization, different types of library may have different roles to play (eg. public libraries for books of a lower intellectual level or for national imprints, academic libraries for works of a higher level or for foreign imprints), but they can still be part of the same system; indeed, in the case of the examples above in parentheses, it is essential that they should be part of the same system, since neither would be able to stand alone. As noted above, switching requests between systems causes delay; and overall monitoring of demand and supply, to ensure adequate performance and remedy deficiencies, is more difficult to achieve with divided systems.

6.5 Unity of provision for all types of literature

Literature can be categorized by subject, language (or language group), date, or form. It should be noted that some forms are easier to provide for on interlibrary loan than others. Serials present least problems, partly because articles in them can be photocopied. As has been noted, however, provision for loans must also be made, since a proportion (certainly more than 10%) of serials requested are not amenable to photocopying, because of illustrations or because whole issues are required. At the other extreme, some types of non-print document, such as recordings on disc and tape-slide productions, are costly to pack and transmit, and have to be checked on return; they may also be produced in only a few copies, so that acquisition is more difficult and more care has to be taken to prevent damage or loss.

Different provision models allow for more or less flexibility.

Model A. Central loan collections can aim to cover all material, or can be limited in various ways: by subject coverage, eg. to science and technology; by language coverage, eg. national imprints only, or works in the language of the country; by date, eg. post-1950 publications only; or by form of material, eg. serials only. The issue is related to the one discussed above, whether central collections should concentrate on material in high demand (eg. science, journals, recent publications) or on material less likely to be provided in other libraries (eg. older publications, report literature, material in less common languages) - and it is of course related also to the question of hierarchy of provision, ie. whether the collection is intended to serve as a first, last or intermediate resort. A central collection that was intended to serve as a first resort for a high proportion of requests but that was restricted in funds or accommodation would undoubtedly need to concentrate first on recent scientific and

technological journals published in the most developed countries. Such a collection would of course need to be supported by other types of provision (Model AC or AD).

A special problem with a dedicated loan collection (though not with a loan collection combined with an existing national reference collection) is that of coverage of older publications. The problem can be reduced, though not entirely solved, if the loan collection serves also as a national repository for books withdrawn from other libraries, which will be able gradually to enrich its holdings of older material. Since in any case it is important that material other libraries can no longer accommodate is not lost entirely to the country, some arrangements for ensuring that withdrawn material is placed where it can subsequently be made available are most desirable.

Model B. Concentration on a few libraries would quite probably be based on some specialization in the first place; eg. one of the libraries involved might be a national science library. Between them, however, the selected libraries would be expected to cover most subjects, languages, dates and forms, leaving perhaps a few marginal areas (eg. oriental languages) to other libraries (Model BC or BD).

Model C. Any planned decentralized system, whether or not specialization is superimposed, would surely be designed to provide coverage of most if not all types of material, though it might be supported by unplanned decentralization in fringe areas.

Model D. By definition, unplanned decentralization has to accept what already exists in libraries, so that the question of limiting

the system to certain types of material does not arise. It is of course highly likely that provision will be stronger in some areas than in others, and when Model D occurs in combination with Model A or B, it may in practice be used mainly for certain types of material.

As pointed out above, it is easier to justify central loan collections for certain types of material - scientific and technological, in common languages, recent and journals. For this reason, if for no other, mixed Models AC and AD may be attractive.

7. FACTORS TELLING AGAINST EFFICIENT NATIONAL INTERLENDING SYSTEMS

A rather different approach to interlending systems from that of identifying models is to analyse factors that tell against efficient interlending, since the elimination or reduction of these factors would clearly do a great deal to improve interlending. To avoid unnecessary repetition of material covered in previous chapters, particularly the preceding one, this chapter is presented in summary form.

The requirements that an interlending system has to fulfil if it is to meet a high proportion of requests speedily and economically can be identified by examining factors associated with (1) failure to satisfy requests, (2) delays and (3) high costs. These are listed below, with comments on ways in which these factors can be eliminated or reduced.

7.1 Factors associated with failure to satisfy requests

a. Unavailability of requested item in the country

Can be reduced by cooperative acquisition schemes, or, more effectively, by comprehensive central loan collections. Central monitoring of demand is necessary to ensure that items required are acquired.

b. Inability to locate item

Can be reduced by effective and up to date union catalogues and by a well organized subject specialization scheme, and virtually eliminated in most cases by comprehensive central loan collections.

c. Item in use or otherwise unavailable at location when requested

A common cause of failure, especially for recent publications.

Can be reduced by more use of photocopies in place of loans, and further reduced by comprehensive central loan collections with multiple copies where required. Union catalogues with multiple locations can help to a limited extent, but copies may be in local use when needed. Central monitoring of demand is necessary to ensure that adequate numbers of copies of works are available.

d. Item not loanable (rare, fragile, needed for reference, recently acquired, etc.)

A fairly common cause of failure. Can be eliminated by comprehensive central loan collections for recent publications, but not for older publications, which can be made more available by copying (perhaps with national support).

7.2 Factors associated with delay

(i) At requesting library:

a. Inefficient internal procedures

Can be improved only by local administration.

b. Checking of requests

A particular problem in smaller libraries with limited bibliographical resources. A national loan centre may do checking more effectively.

c. Selection of possible source of supply

Necessary with union catalogues with multiple locations, and with subject specialization schemes; not necessary with comprehensive central loan collection, or with centres to which all requests are directed.

d. Use of a variety of forms and procedures to make requests on different sources.

Can be reduced by cooperative action, or eliminated by comprehensive central loan collection or single loan centre.

(ii) In transmission:

e. Long distance

A real problem only when communications are poor (2f). Can be reduced by regional schemes. The location of any central loan collection must be carefully chosen - eg. geographically central or at hub of transport system.

f. Slow communications

Can sometimes be reduced by use of express or first class mail, or by use of rail and/or road transport; or by use of telex or computer for sending requests.

(iii) At supplying library:

g. Inefficient internal procedures

Due partly to the fact that systems in local libraries are primarily designed for local users. Can be eliminated by dedicated loan collection, and reduced if all requests go through a single centre.

h. Need to handle a variety of forms and procedures used by local libraries

Can be reduced by cooperative action, and eliminated by comprehensive central loan collection, or a centre to which all requests go.

i. Requests with inadequate information

See 2b above. A major cause of delay and frustration, especially if requests have to be returned to the requesting library. A centre with large bibliographical resources can identify some inadequate references, and some may be found in a central loan collection without further checking.

j. Failure to supply

A very serious cause of delay, as it necessitates repeated requests. Can be reduced by comprehensive central loan collection, or by limited central collection supported by selected other sources.

7.3 Factors associated with high cost

a. Inefficient internal procedures

In the supplying library, can be reduced by dedicated loan collections.

b. Variety of forms and procedures

Can be reduced by cooperative action, or eliminated by comprehensive central loan collection.

c. Checking of inadequate or inaccurate requests

Can be very time-consuming - see 2b and 2i above.

d. Selection of possible source of supply

Not necessary with comprehensive central loan collection. Reduced if all requests go to one centre, but the centre may still have to select.

e. Need to send requests to several sources

Not necessary with comprehensive central loan collection or with national loan centres, but in the latter case much of the cost is transferred from the requesting library to the centre.

f. Need to make more than one application

Very expensive. Can be reduced with comprehensive central loan collections with multiple copies where required. Can also be reduced by the circulation of requests on a rota of locations, but this incurs other substantial costs.

g. Expensive transmission of request (eg. by telex)

Must be weighed against the extra speed of telex. Probably

justified only with a large volume of requests or when speed is of paramount importance.

h. Expensive transmission of document

Can be greatly reduced by use of photocopies in place of loans (cost much less to send, and do not have to be returned). Can in some countries be reduced by use of more economic systems (eg. rail or road transport instead of postal service).

i. Reclaiming and accounting procedures*

Repayment is not always required - but in such cases the borrowing library has less incentive to use the interlending system economically, because borrowing may appear cheaper than acquisition when it is not in fact so. Administrative costs can be minimized by systems using prepaid coupons or deposit accounts, so that payment is not reclaimed or made individually by item. An alternative method of payment, which may be especially valuable for countries with currency difficulties, is the use of internationally acceptable Unesco book coupons. Where libraries are in balance, payment can be waived.

j. Union catalogues

Expensive to construct and maintain, although some of the costs may be 'hidden' in cooperating libraries. Can be reduced by reducing the need for union catalogues, and by rationalization (of coverage of libraries, or holdings, etc).

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* It should be noted that, in itself, repayment is irrelevant to the total cost of interlending, apart from the administrative costs involved; it is merely a question of the allocation of costs between the requesting and supplying library. In any case, where repayment is required, the amount involved is usually only $\frac{1}{4}$ or $\frac{1}{3}$ of the total costs incurred by the borrowing library.

k. Provision of adequate document resources available for loan or photocopy

Any scheme for extending existing resources is expensive, and the more libraries involved in the scheme the more expensive it is likely to be; central provision should be cheaper than cooperative provision. Schemes for duplicating existing resources to provide better availability may be more expensive still (eg. dedicated loan collections; combined reference/loan collections are much less expensive).

The factors listed above are of course interrelated. Steps taken to reduce one problem could increase another, and improvements must be planned in the light of all the relevant factors. However, improvements in some aspects are independent of others - for example, increased efficiency in requesting libraries (2a); and some improvements in other aspects can be made without reference to wider issues - for example, photocopies can be more extensively used (3h). Even within existing interlending systems, substantial improvements are possible.

It is obvious that the factors listed vary widely in their importance. Importance will vary from country to country - for example, unavailability of items at locations (1c) may be a much more significant factor in some countries than unwillingness to loan (1d) and a much less significant factor in others. Factors which may appear minor, such as those associated with procedures (eg. 2 a,c,d,g,h; 3 a,b,d,e) may on examination be found to play a much larger role than suspected. No attempt is made here to weight factors according to importance, because of the probable local variations. It is however suggested that a detailed study might be undertaken in several countries to identify the most important causes of failure to supply, delay and high cost, both so that local action can be taken and so that the results

from the different countries can be compared.

For the day-to-day business of transaction of interlibrary loan requests, comprehensive, preferably dedicated, central loan collections can evidently do much more to reduce or eliminate weaknesses than any other expedient. However, the last factor of all, the very high cost of such collections (3k), may be of overwhelming significance.

8. OTHER ASPECTS OF INTERLENDING SYSTEMS

8.1 Relationship of national interlending systems to those of other countries

Any or all of the models described may be affected by the interlending systems in neighbouring countries. Neighbouring systems that are capable of giving a good service beyond their boundaries may make it possible to aim at a lower level of national self-sufficiency, and if they offer a fast supply they may affect a decision whether to concentrate provision on one or a few libraries, or indeed whether to concentrate it at all. For example, a very efficient central loan collection in a neighbouring country may make a similar collection unnecessary, so that emphasis can be placed on the support systems (Model C or D) or perhaps on Model B. (If Sweden set up a comprehensive loan collection, it is doubtful if Norway, Denmark or Finland would also need such collections).

Other types of system than Model A in neighbouring countries are less likely to affect basic system decisions, because libraries abroad that carry out interlending as a marginal activity could easily be overwhelmed by substantial additional demand. System design could however be affected marginally, for example by the existence in a neighbouring country of very strong specialist collections in certain areas. The precise extent to which reliance - permanent reliance, as far as can reasonably be predicted - can be placed on other countries must be determined before it is decided to reduce local provision below the level set as an aim; both the willingness and ability of the neighbouring system, not merely to serve present needs but possibly to handle large increases in demands, must be established. It is suggested that great caution is desirable before substantial reliance is placed on other countries,

and then perhaps only as a short-term solution before greater national self-sufficiency is attained.

The above comments refer to neighbouring countries, but the same considerations apply a fortiori to more distant countries. In the immediate future, developing countries are bound to depend, probably heavily, on the interlending systems of some developed countries, and this dependence may be economic and satisfactory in the short term. But the ultimate aim must be to attain an optimal level of self-sufficiency, for economic if for no other reasons.

8.2 Relationship of national interlending systems to national acquisitions programmes

It has been apparent that national interlending systems cannot be considered separately from national acquisition programmes. Where no such programme exists, the interlending system has to take this into account, and should be either based on Model D (insofar as this can be called a system) or planned as Model A. Where there is a strong acquisition programme, as is implicit in Model C, the basic interlending system may be built on it, or the acquisition programme may be used as a basis for a supporting system to Model A or B.

Alternatively, an acquisition programme can be ignored, and a Model A or B constructed (though selected libraries in Model B may in fact be especially strong elements in a national acquisition programme). Conversely, with a Model A central loan collection a national acquisition programme may be rejected as unnecessary or reduced to a supporting role for marginal areas, depending on the coverage of the central collection. With Model AC, the central collection may be one element in a national acquisition programme.

Where strong national acquisition programmes already exist, but do not adequately serve or support interlending, should they be adjusted, or even radically changed, to do so? The answer is surely Yes, since the main aim of a national acquisition programme must be to ensure that a wide range of material is nationally available. The mere existence of material in various libraries is only of limited value, and in fact a programme cannot be said to be 'strong' if it cannot make the material acquired nationally available. Strength must lie not only in acquisition but in availability. It seems probable that some national acquisition programmes have not taken this essential factor sufficiently into account.

8.3 Relationship of national interlending systems to national repository programmes

As with national acquisition programmes, the questions of national interlending systems and national repository (or 'book retirement') programmes need to be considered together. In several countries the inability of local libraries to provide adequate accommodation for their growing collections is causing serious concern, and in some countries plans are being made to 'retire' less used material.* In the past, much material has been withdrawn from libraries and effectively lost to the nation, because there has been no obvious place to send it.

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*In some other countries, overcrowded libraries are unable to withdraw unwanted material because their stock is regarded as a capital asset that must not be eroded.

A common solution to this problem is to have a national exchange system whereby unwanted material can be taken up by other libraries, or sent abroad; but such systems do not and cannot ensure that the items in question are taken up or permanently retained, still less that they are readily available for subsequent loan if required.

Recently, there has been a tendency in some countries to designate certain libraries as repositories to which withdrawn material can be sent. These may be libraries specializing in the subjects concerned, or they may be purpose-built repositories. What seems clear is that the libraries to which such material is sent should be able to make it readily available, and that therefore they should be libraries forming part of the national interlending system. A Model A national loan collection (whether dedicated or shared), where it exists, is a natural recipient for material within its scope, and perhaps for other material as well, since a retirement scheme by which all withdrawn material is sent to one place is obviously simplest for all concerned (material it is offered but already possesses can be offered to other libraries). Model B, concentration on a few libraries, makes almost as simple a system possible. Model C, a system based on specialist collections, is considerably more complicated, depending on the number of libraries involved, the clearness of their subject or other boundaries, and their willingness and ability to ensure permanent retention. With Model D, any rational retirement programme is virtually impossible.

Any country planning a national retirement or repository programme should integrate it with the national lending system.

9. MECHANICS AND PROCEDURES OF INTERLENDING

This report is concerned with systems rather than procedures, and the following discussion of the mechanics and procedures of interlending is therefore conducted in general terms. A full discussion would require a detailed analysis of existing procedures in different countries in the light of their particular requirements. Since their requirements will depend to a large extent on the basic structure of their interlending systems, many of which this report suggests are in urgent need of radical revision and improvement, a detailed discussion of mechanics at this stage would in any case be premature.

9.1 The nature of interlending mechanics

By 'mechanics' are meant the various practical procedures involved in interlibrary lending. Some of these, such as methods of recording transactions, concern only the individual libraries involved. More important are the procedures that affect more than one library, such as the use and design of request forms. Even these will inevitably differ from country to country; for example, accounting requirements may make it necessary to keep records of transactions in a level of detail not otherwise needed, or to send receipts for items borrowed. Nevertheless it may be useful to specify the main elements likely to be common to interlending procedures in most countries, indicating those that affect both requesting and supplying libraries, and where relevant intermediate agencies such as union catalogue centres. Attention is also drawn to items of stationery used in interlending, since much of the effectiveness of interlending systems depends on the design and use of forms.

Below outline procedures are given both for requesting and supplying libraries. It should be emphasized that these procedures represent only

approximate models: it is unlikely that in any one country they will be used precisely in the manner outlined. They are moreover oversimplified, and do not provide for by any means all the contingencies that can arise in interlending, especially with systems that allow for requests to circulate around libraries and systems in which many requests go through intermediate agencies. Nor is any provision made for payments or receipts. The procedures below therefore serve only as a kind of checklist.

An attempt has been made to use terms precisely and consistently, though the terminology used should not be regarded as definitive. The general point may be made that in each country terms used in interlending should be defined and standardized to ease communication between library and avoid misunderstanding.

A greatly simplified flowchart of the procedure through which an interlibrary loan request goes is provided as figure 3.

9.2 Basic interlending procedure for the requesting library

Items of stationery are numbered where they occur. Numbers preceded by 'R' refer to items of stationery that are used only in the requesting library: numbers preceded by 'N' refer to items used between libraries; and numbers preceded by 'S' refer to items used by the supplying library.

1. Receipt and checking of request

1.1 Receives request from user on local request form (R1)

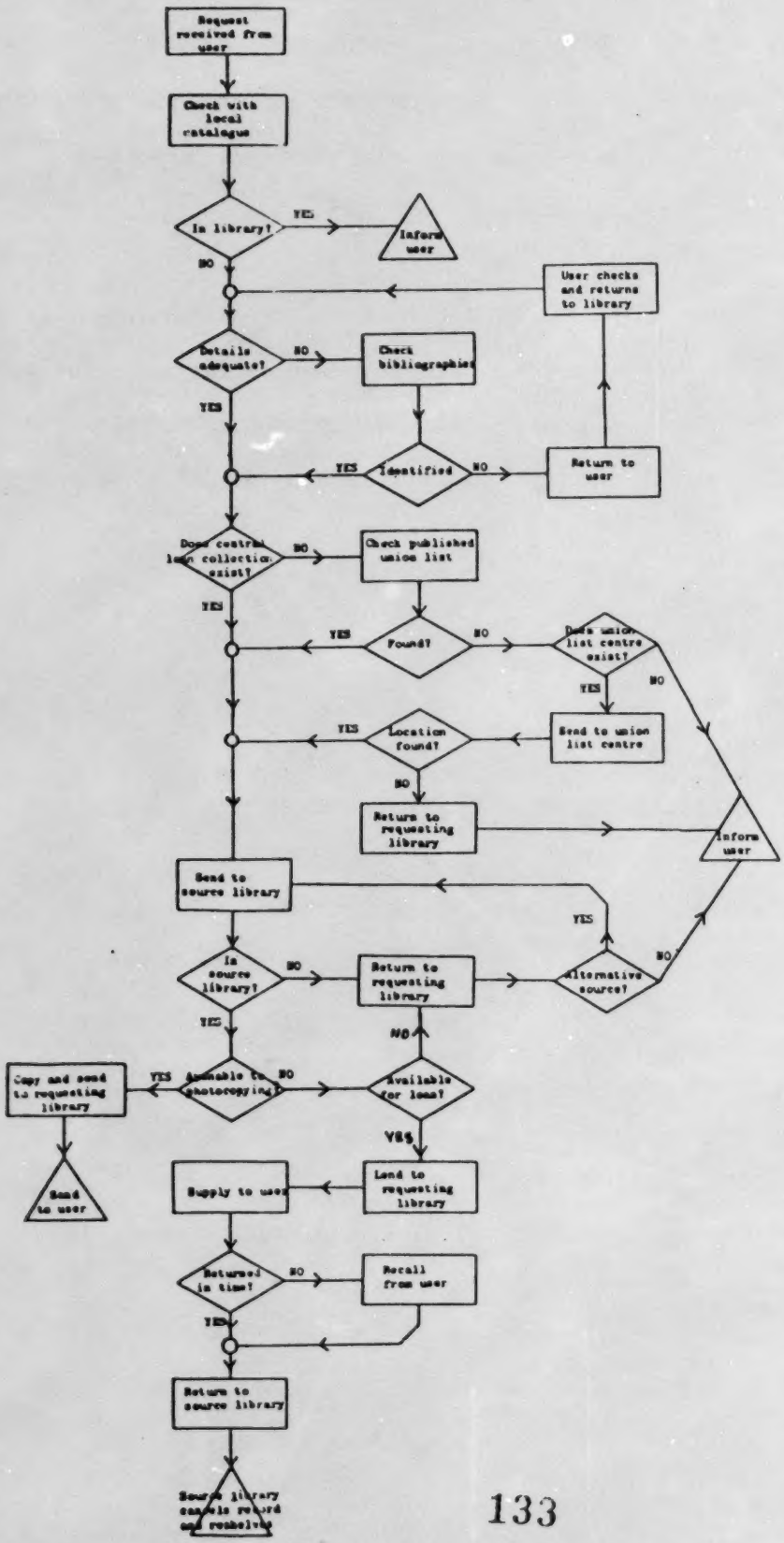
1.2 Checks request against catalogue:

if found, notifies user

if not found -

Figure 3

SIMPLIFIED FLOWCHART OF INTERLENDING PROCEDURE



1.3 Checks request if necessary against bibliographies:

if not identified, asks user for more details (R2);

if identified -

1.4 Searches union catalogue, if available and relevant, to find location; or speculates as to likely location.

2. Despatch of request

2.1 Transcribes request on to ILL request form (N1)

2.2 Despatches request to potential supply source or intermediate agency with preaddressed label (R3) for supply of document

2.3 Files copy of request (copy of R1 or N1) so that it can be retrieved by details of document and by date of request.

3. Receipt of document or other communication

3.1.1(a) either Receives requested document (loan or photocopy) with (in case of loans) preaddressed label for return (S1) and date-for-return notice (S2)

3.1.1(b) Matches item with file copy of request (copy of R1 or N1)

3.1.1(c) Notifies user (R4) or sends direct in case of photocopy

3.1.1(d) Refiles file copy of request, together with preaddressed label, for retrieval by date of return and details of document (or of user) (in case of photocopy, file copy goes into 'completed' file)

3.1.2(a) or Receives request from supplying library for further details (N2)

3.1.2(b) Sends further details (N3), after asking user if necessary (R2)

3.1.3(a) or Receives notification of delay in supply (N4)

3.1.3(b) Notes delay on file copy of request, and notifies user if necessary (R5)

3.1.4(a) or Receives notification of failure to supply (N5)

3.1.4(b) Abandons request or Approaches another potential supply source or intermediate agency.

3.1.4(c) Notifies user (R6)

3.1.5(a) or Receives no notification after a given period

3.1.5(b) Reminds potential supply source (N6)

3.2 Requests extension of loan when necessary (N7)

3.3 Receives notice of renewal (N8) or recall (N9).

4. Return of document

(Not applicable to photocopies)

4.1 Recalls item from user (R7) if overdue or recalled (N9)

4.2 Receives document back from user

4.3 Extracts file copy of request (R1 or N1), notes date of return and removes to 'completed' file

4.4 Despatches document to supplying library, using preaddressed label (S1).

9.3 Basic interlending procedure for the supplying library

For numbering of items of stationery, see note under previous subsection.

1. Receipt and checking of request

1.1 Receives ILL request form from requesting library (N1)

1.2 Checks against holdings (catalogue and/or shelves)

1.3 Retrieves document if available

1.4 Photocopies wanted pages where appropriate and reshelves.

2. Despatch of document or other communication

2.1.1 either Despatches loan or photocopy to requesting library, using preaddressed label (R3), and in case of loans, enclosing preaddressed label for return (S1) and date-of-return notice (S2)

2.1.2 Records despatch on ILL request form (N1): in case of loans files by details of document and/or date of return; in case of photocopies, files in 'completed' file

2.2.1 or Asks requesting library for further details (N2)

2.2.2 On receipt of further details (N3) proceeds as above (1.2, 1.3, 2.1)

2.3.1 or Notifies requesting library of delay in supply (N4)

2.3.2 Adds request to waiting list

2.3.3 When ready, proceeds as above (1.2, 1.3, 2.1)

2.4.1 or Notifies requesting library of failure to supply (N5) or if appropriate, passes request to another potential supply source.

3. Return of document

(Not applicable to photocopies)

3.1 Deals with request for extension of loan (if any) (N7)

3.2 Checks file for overdues

3.3 Recalls if overdue or if wanted by another user or library (N9)

3.4 Receives document back from requesting library

3.5 Matches with ILL request form (N1), which is filed in 'completed' file.

9.4. Stationery used in interlending

By careful design of basic forms in multiple copies reproduced by carbon paper, and by the preparation of several suitably worded standard notices, the amount of writing or typing (and rewriting or retyping) is reduced to a minimum. It should however be stressed that the basic forms must be designed with multiple functions in mind, otherwise the result is likely to be an overcrowded and very detailed form that is difficult to use.

All stationery that is used for sending material relevant to interlending through the post (eg. address labels, envelopes, etc) should be clearly labelled INTERLIBRARY LOANS. 'URGENT' stamps or stickers can be added in appropriate cases (eg. urgent recalls).

The following lists of stationery relate to the outline procedures above, and are not necessarily comprehensive - nor may all of them be essential in a particular system. They illustrate how requirements can be met with a relatively small number of forms and notices.

9.4 (a) Items of stationery used between libraries (N)

N1. ILL request form

This is by far the most important item of stationery, and its design critically affects the efficiency of interlending procedures. In theory it could be combined with R1, the local request form, but the difficulties of combining the various functions of the two forms in one item of stationery are much greater than any advantage gained therefrom. The main use of the ILL request form is of course to request documents from other libraries.

It must therefore satisfy the requirements of supplying libraries and perhaps intermediate agencies also. It must contain provision for details of the document requested, the supply source's name and address, the date for return, and the requesting library's name and address; this last information can, if the form is well designed, take the form of a detached address label. The form must be capable of filing (by the supplying library) by details of document and date of return. It should contain a serial number for reference purposes.

A copy of the form may be sent with the document to the requesting library to facilitate matching with the local request form (R1) and to indicate (though this can be done equally well by quoting the serial number of the form) the date for return (S2). Copies of the form may also be used, if necessary, with attachments:-

(a) by the potential supply source:

for requesting further details from the requesting library (N2)

for notification of delay in supply (N4)

for notification of failure to supply (N5)

for notification of extension of loan (N8)

for recall if overdue or wanted by another library (N9).

(b) by the requesting library:

for sending further details as requested (N3)

for reminding the potential supply source (N6)

for requesting extension of loan (N7).

N2. Request for further details from requesting library

N3. Sending of further details

N4. Notification of delay in supply

N5. Notification of failure to supply

N6. Reminder to potential supply source

N7. Request for extension of loan

N8. Notification of extension of loan

N9. Recall from requesting library.

These can all take the form of separate items of stationery, but this requires the transcription of details of the request, and it is preferable to use the ILL request form (N1) with suitably worded standard notices (eg. 'Please supply further details') which can be attached to copies of N1 or photocopied alongside it. The addresses on the form can then be used in a window envelope. A well-designed form can in fact incorporate some of the above without the need for standard notices: for example the British Library Lending Division request form (Figure 4) incorporates provision for N4 and N5 as well as R3 and S2. Figure 5 illustrates the use of standard notices.

The form may also have to be capable of being rerouted in systems where requests are circulated round a rota of libraries. Information such as source of reference may be needed, and space may be provided for such requirements as 'microfilm acceptable'.

9.4 (b) Items of stationery used by the requesting library (R)

R1. Local request form

Must contain details of document and user's name and address; must be capable of filing by date of request, details of document and date for return.

May also be used:

(a) to ask user for further details (R2)

(b) to notify user of receipt (R3)

(c) to notify user of delay in supply (R4)

(d) to notify user of failure to supply (R5)

(e) to recall from user (R6)

Figure 4

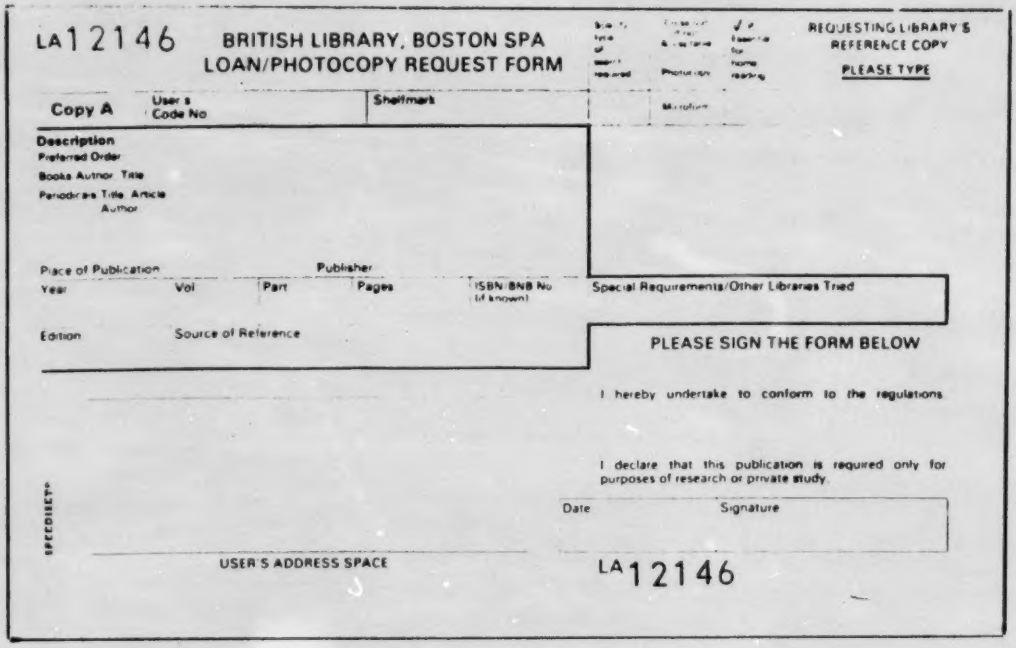
THE INTERLENDING FORM USED BY THE BRITISH LIBRARY LENDING DIVISION.

NB Illustrations are ½ actual size.

The form is in three parts, separated by carbon paper. The versos of Parts A and B are blank.

Figure 4a

Copy A: Retained by requesting library as file copy.


LA12146 BRITISH LIBRARY, BOSTON SPA
LOAN/PHOTOCOPY REQUEST FORM

Photocopy | Microform | ✓ if loan for home reading

REQUESTING LIBRARY'S REFERENCE COPY
PLEASE TYPE

Copy A | User's Code No | Shelfmark

Description
Preferred Order
Books Author Title
Periodicals Title Article Author

Place of Publication | Publisher
Year | Vol | Part | Pages | ISBN/BNB No (if known)
Special Requirements/Other Libraries Tried
Edition | Source of Reference

PLEASE SIGN THE FORM BELOW

I hereby undertake to conform to the regulations

I declare that this publication is required only for purposes of research or private study.

Date | Signature

SPECIMEN

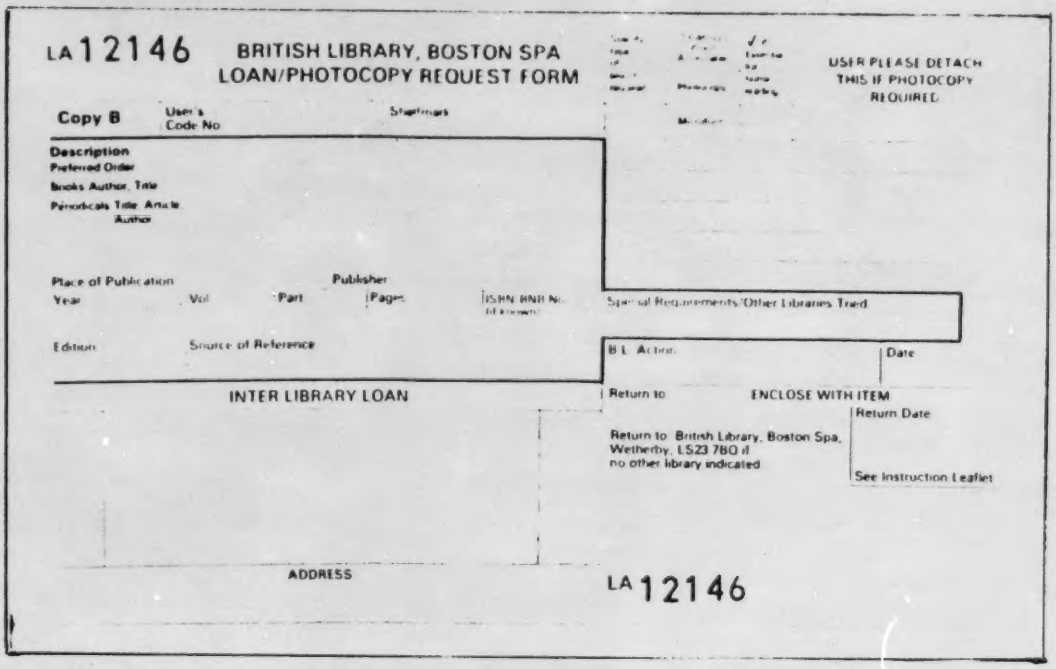
USER'S ADDRESS SPACE

LA12146

Figure 4b

Copy B: Sent (with Copy C) to British Library Lending Division or other source library.

Filed (with Copy C) by Lending Division in the place of the item lent, or returned (with Copy C) to requesting library when Lending Division does not have the item (locations are added to the form when found), or when there is already a waiting list for the item.


LA 12146 BRITISH LIBRARY, BOSTON SPA
LOAN/PHOTOCOPY REQUEST FORM

USER PLEASE DETACH THIS IF PHOTOCOPY REQUIRED

Copy B

User's Code No

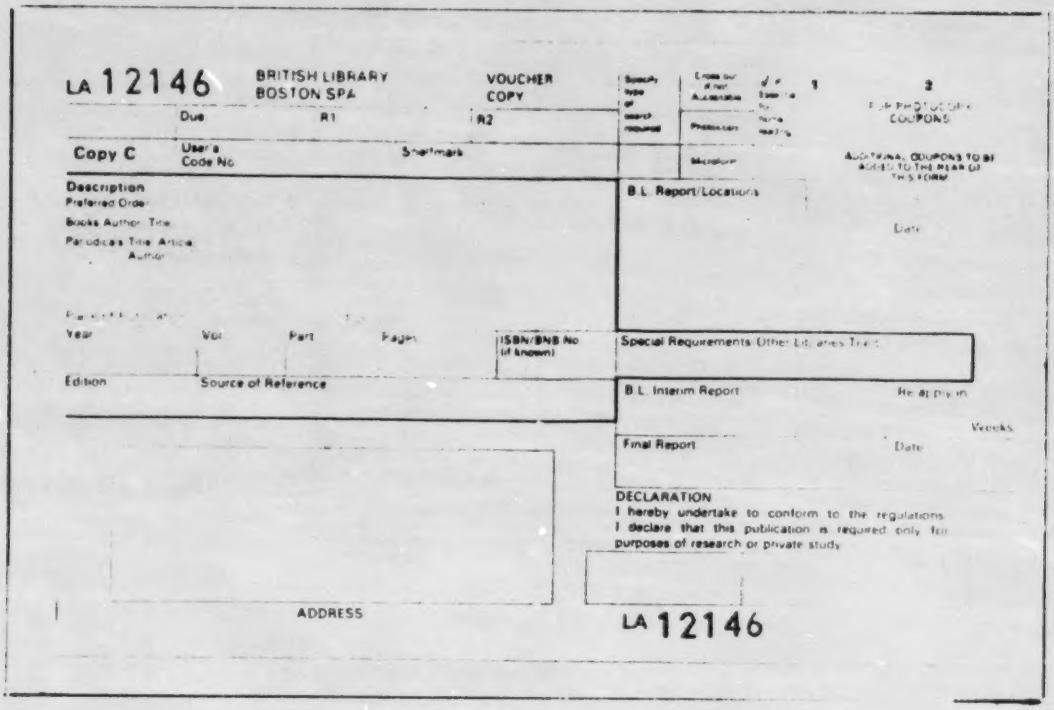
Description
Preferred Order
Books Author, Title
Periodicals Title, Article Author

Place of Publication
Publisher
Year
Vol
Part
Pages
ISSN/NBN No. (if known)
Special Requirements/Other Libraries Tried
Edition
Source of Reference
B L Action
Date
INTER LIBRARY LOAN
Return to
ENCLOSE WITH ITEM
Return Date
Return to British Library, Boston Spa, Wetherby, LS23 7BQ if no other library indicated
See Instruction Leaflet
ADDRESS
LA 12146

Figure 4c

Copy C: Sent (with Copy B) to British Library Lending Division or other source library.

(1) Recto:



(2) Verso:

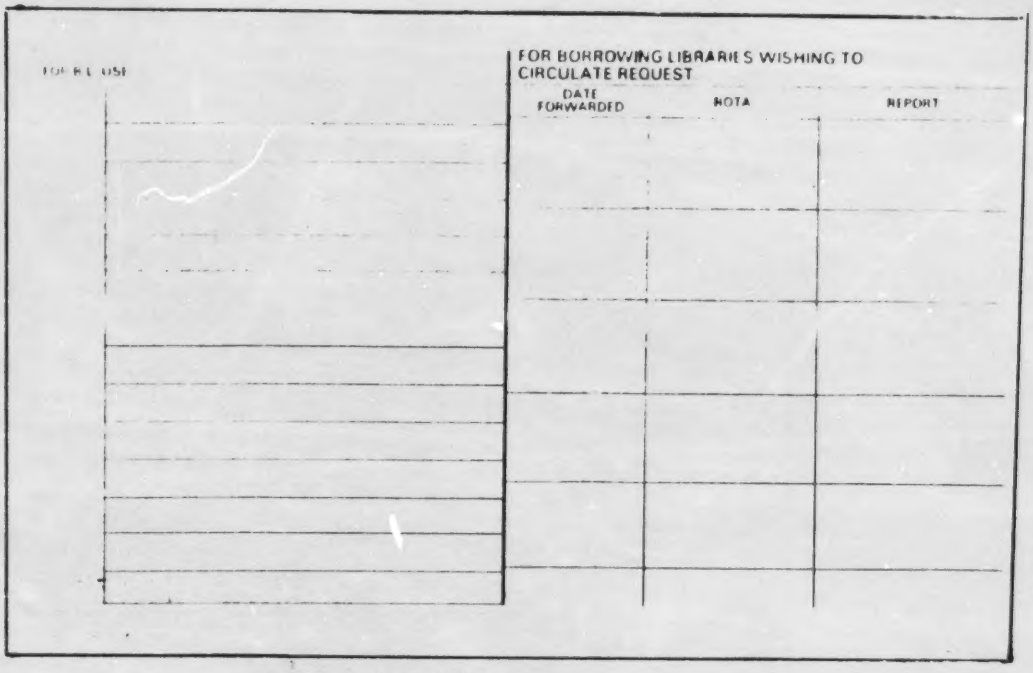
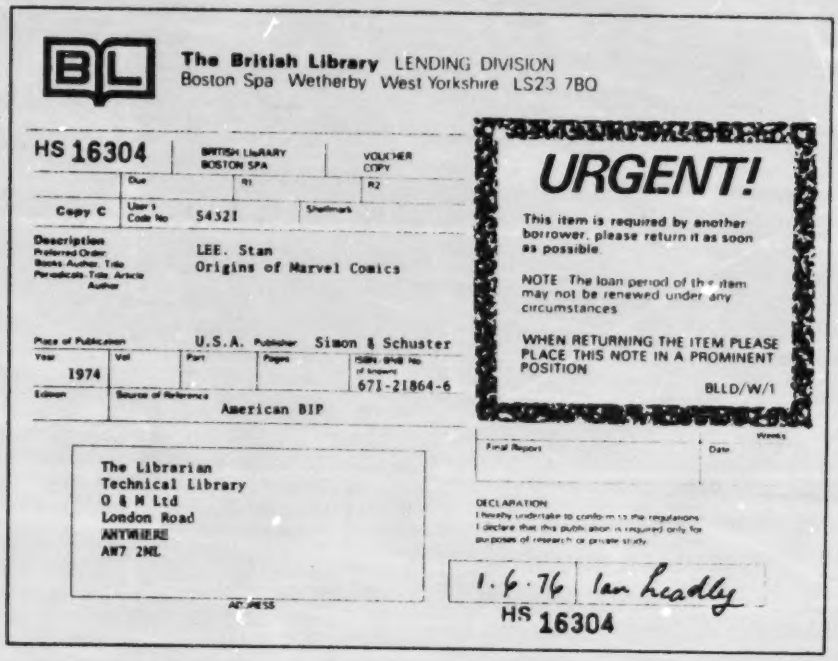


Figure 5

OTHER INTERLENDING STATIONERY USED BY THE BRITISH LIBRARY LENDING DIVISION

The items illustrated are only examples of the stationery used. They are shown as they are actually used, ie attached to a copy of the request form (as in (b), (c)) or photocopied together with the request form (as in (a)).

Figure 5a. Recall of item wanted by another library



The British Library LENDING DIVISION
Boston Spa Wetherby West Yorkshire LS23 7BQ

HS 16304 | BRITISH LIBRARY BOSTON SPA | VOUCHER COPY

Due | R1 | R2

Copy C | User's Code No 54321 | Shelfmark

Description
Preferred Order
Books Author Title
Periodicals Title Article
Author

LEE. Stan
Origins of Marvel Comics

Place of Publication U.S.A. Publisher Simon & Schuster

Year 1974 | Vol | Part | Pages | ISBN/SH8 No of request 671-21864-6

Edition | Source of Reference American BIP

The Librarian
Technical Library
O & M Ltd
London Road
ANYWHERE
AN7 2ML

ADDRESS

URGENT!

This item is required by another borrower, please return it as soon as possible.

NOTE The loan period of the item may not be renewed under any circumstances

WHEN RETURNING THE ITEM PLEASE PLACE THIS NOTE IN A PROMINENT POSITION

BLLD/W/1

Weeks

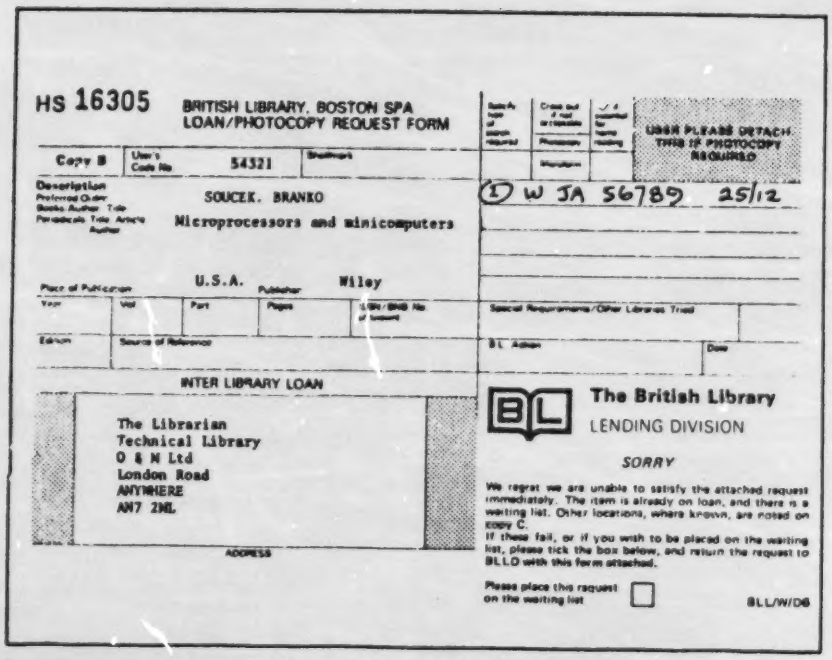
Final Report | Date

DECLARATION
I hereby undertake to conform to the regulations.
I declare that this publication is required only for purposes of research or private study.

1.6.76 | Ian Headley

HS 16304

Figure 5b. Notification to requesting library of delay because item is on waiting list.



HS 16305 BRITISH LIBRARY, BOSTON SPA
LOAN/PHOTOCOPY REQUEST FORM

Copy B | User's Code No 54321 | Shelfmark

Description
Preferred Order
Books Author Title
Periodicals Title Article
Author

SOUCEK. BRANKO
Microprocessors and minicomputers

Place of Publication U.S.A. Publisher Wiley

Year | Vol | Part | Pages | ISBN/SH8 No of request

Edition | Source of Reference

INTER LIBRARY LOAN

The Librarian
Technical Library
O & M Ltd
London Road
ANYWHERE
AN7 2ML

ADDRESS

Supply type of details required | Cross out if not acceptable | ✓ if acceptable for Photocopy/Loan

Photocopy

Monograph

USER PLEASE DETACH THIS IF PHOTOCOPY REQUIRED

(1) W SA 56789 25/12

Special Requirements/Other Libraries Tried

BL Action | Date

The British Library
LENDING DIVISION

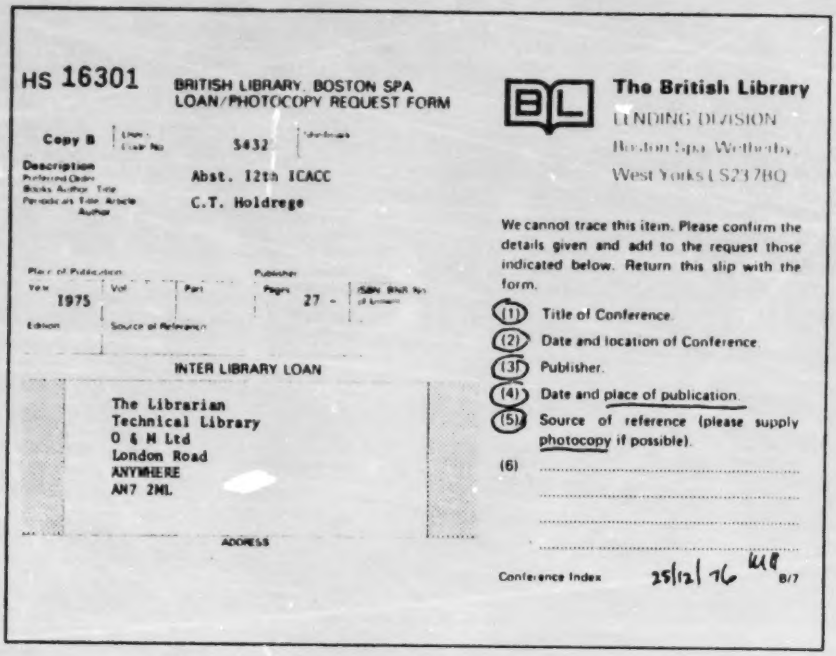
SORRY

We regret we are unable to satisfy the attached request immediately. The item is already on loan, and there is a waiting list. Other locations, where known, are noted on copy C.
If these fail, or if you wish to be placed on the waiting list, please tick the box below, and return the request to BLLD with this form attached.

Please place this request on the waiting list ☐

BLL/W/D6

Figure 5c. Request for further details



HS 16301

BRITISH LIBRARY, BOSTON SPA
LOAN/PHOTOCOPY REQUEST FORM

Copy B | 5432

Description
Abst. 12th ICACC
C.T. Holdrege

Year 1975 | Vol | Part | Pages 27 - | ISBN, ISSN No.

Edition | Source of Reference

INTER LIBRARY LOAN

The Librarian
Technical Library
O & M Ltd
London Road
ANYWHERE
AN7 2ML

ADDRESS

The British Library
LENDING DIVISION
Boston Spa, Wetherby,
West Yorks LS23 7BQ

We cannot trace this item. Please confirm the details given and add to the request those indicated below. Return this slip with the form.

(1) Title of Conference.
(2) Date and location of Conference.
(3) Publisher.
(4) Date and place of publication.
(5) Source of reference (please supply photocopy if possible).
(6) .....

Conference Index 25/12/76 WLB B/7

- either by copy of multiple copy form with attachment (eg. 'Please collect the attached item, which has now been received')

or by photocopying request form alongside appropriate message (eg. as above).

(In either case the user's name and address on the form can be used to insert in a window envelope).

R2. Request to user for further details

R4. Notification to user of arrival of document

R5. Notification to user of delay in supply

R6. Notification to user of failure to supply

R7. Recall of document from user.

These can all take the form of separate items of stationery on which details of the request and the user's name are transcribed, or preferably (as suggested under R1) as special notices with standard wording, to be attached to copies of the local request form (R1) or photocopied alongside it.

R3. Preaddressed label for supply of document

This can be a separate preprinted (or duplicated) adhesive label or (preferably) can form part of the ILL request form (N1).

9.4 (c) Items of stationery used by the supplying library (S)

S1. Preaddressed label for return of document

This label, which facilitates accurate addressing and return, is a separate preprinted (or duplicated) adhesive label.

S2. Date-of-return notice

This can either be a separate notice, or can form part of the ILL request form (N1) if this is despatched with the loan.

10. CONCLUSIONS

10.1 The need for a systematic approach to interlending

There appears to be a need for considerable improvement, and sometimes for radical change, in the interlending systems of many developed countries, and an equal need for developing countries to build into their national library plans, as an integral element, effective interlending systems. National interlending systems should be an integral part of national information systems. They also form an essential contribution to the furtherance of Universal Availability of Publications, since unless documents are available within countries they cannot be made available either to the inhabitants of those countries or to other countries that lack them.

Without effective interlending, more and more publications wanted by users will prove unavailable or will not reach them in time. That existing interlending systems are showing signs of strain appears to be demonstrated by the plans for central loan stocks in the USA and France, and by vigorous discussion in other countries such as the Federal Republic of Germany; just as it was mainly the inadequacy of interlending systems in the UK in the 1950s that led to the creation of the National Lending Library for Science and Technology.

In few countries has interlending been regarded as an issue that requires detailed consideration in its own right, but the time for such consideration has, we believe, now come. Most countries have modified and improved practices, and designed new elements of interlending machinery from time to time, but they have not attempted to plan a total system in the light of an analysis of demands, needs and options. Indeed, for few countries can a

clear and full picture be obtained of present practices and procedures, so that the situation can very rarely be seen as a whole, and it is by no means certain that the most serious problems are being tackled. Too often the reaction to any deficiency that has been identified has been not to examine the system but to add more machinery or to devise special procedures to meet the problem; for example, a special mechanism may be devised to provide official publications*, or a new union catalogue may be created to link libraries in an area. These expedients may be useful, but they are partial. Common deficiencies in interlending systems are low satisfaction rates, especially for recent publications; slow speed of supply, a supply time of less than two weeks being exceptional; cumbersome, time-consuming and staff-intensive procedures; and, probably, high hidden costs. These characteristics, separately or in combination, constrain demand, which would otherwise quite possibly overwhelm the system and force change. It is our belief that substantial, and sometimes dramatic, improvements could be achieved without very large expenditure and indeed with substantial long-term savings. We believe that the approach to interlending adopted in this study is as important as its proposals and conclusions.

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* The 'Convention concerning the exchange of official publications and government documents between States adopted by the General Conference (of Unesco) at its Tenth Session, Paris, 3rd December 1958' allows the transmission of such documents to be made directly to recipients named by the exchange authorities and facilitates their acquisition. However, acquisition and exchange are by no means always possible alternatives to interlending, with which the present study is concerned.

10.2 Main characteristics of basic models

Using the models in Chapter 6 as a basis, we now consider which types of model may be most appropriate for particular situations. It is necessary however to emphasize at the outset that each country is unique, and its circumstances (see Chapter 3) must be studied individually if the best solution is to be found. In developing countries in particular, it is necessary to build on strength where real strength exists. The following suggestions should be regarded as indicators rather than firm proposals.

Model A. A dedicated centralized collection clearly has great advantages over other systems, provided it is organized efficiently. Because it is designed specifically for interlending, it can optimize its procedures and give a fast service from its own stock. Providing its coverage within different categories of material is comprehensive enough, the probability of satisfaction is high. However, several reservations must be made. In the first place, efficiency is hard to guarantee; there may moreover be some dangers in over-much centralization. Secondly, the cost of setting up and maintaining dedicated centralized collections is very high. Even if centralization can be economically justified in the long run, the costs in the first and subsequent years may be prohibitive. The money required is unlikely to be available in developing countries, and even in developed countries demand has to be very large to justify the expenditure. On cost factors alone, comprehensive dedicated centralized loan collections seem to be justifiable only in large developed countries with a substantial volume of demand. Even in these, some support, in the form of planned or unplanned decentralization, is necessary.

However, there may well be a strong case for partial centralized collections, dealing with limited categories of material, and perhaps also aiming at only 70% or 80% satisfaction rates within those categories. Such a collection for scientific and technological journals could perhaps handle as much as 50% of all demand in many countries, and its costs would not be excessive. The case for such limited centralized collections is all the stronger because the main need for speed appears to be for scientific and technological journals.

The location of any centralized collection should be carefully planned to optimize supply. This does not imply that it must be in the geographical centre of the country, still less in the capital, but it must be well situated for transport and supply routes.

Where a dedicated centralized collection is strong, support in the form of unplanned decentralization (Model D) is probably adequate, depending on the quantity and quality of other library collections in the country. Where the central collection is partial or less strong, planned decentralization (Model C) is desirable to support it.

An acceptable alternative in some circumstances to a dedicated central collection is a central loan collection shared with a national reference collection. Most countries have national libraries, and others are being created in developing countries. It is not easy to superimpose a lending function on a long-established reference collection, because of the modifications in its practices that are required, but when a national library is young or is in process of creation there seems no valid reason why it should not be designed as a combined loan and reference collection.

Little addition is needed to the resources it will need for reference to give an adequate lending service, and the interlending burden on other libraries can be greatly lightened. The solution commends itself both where research and development are fairly highly concentrated in one place (so that consultation is possible), and where researchers are scattered (and so unlikely to have adequate local provision). It would seem to be a particularly attractive solution for developing countries with limited resources.

As with dedicated central collections, shared central collections need to be supported by planned or unplanned decentralized systems. Initially in developing countries, demand may be slight, but the system must be designed so that it can handle more demand when it comes, as is certain to happen. Indeed, when demand reaches a certain level, the central collection may need to be used as a second rather than a first resort if its reference function is not to be hampered.

National libraries are usually, almost by definition, comprehensive in coverage, so that the question of partial provision is less important than with dedicated central collections. However, it should be noted that the supply of photocopies, which obviates the need for items to leave the premises, is considerably easier to reconcile with a reference function than the loan of original items.

Model B. Concentration on a few libraries can be seen as a cheaper alternative to a central collection, if a few libraries can be identified as holding a large proportion of items likely to be wanted in the country. Such a situation is most likely to occur in smaller developed countries,

where it is not uncommon to find two or three large, possible subject-specialized, libraries that contain a very high proportion of all the titles held in the country. Little or no addition need be made to the provision they already make, and the volume of demand is not likely, at least in a smaller country, to be so large as to overwhelm them. What is however required is a radical change in orientation, and quite probably some change in procedures, since it is very doubtful if interlending can be tacked on to existing functions effectively. Whether such changes can actually be introduced could only be established by practical experimentation, but it must be pointed out that the probable alternative is either an inefficient lending system or much greater expenditure on a dedicated collection.

There is another major requirement if the solution is to be fully workable: the selected libraries must be paid for the costs they incur in supplying items to other libraries. Payment may be made either by the Government, which might otherwise have to spend much larger sums on a dedicated service, or may be recovered from payment by contributing libraries for each transaction. Any system of payment must be carefully designed to be as simple as possible, if considerable administrative costs are not to be incurred.

Although this solution is suggested as a possible one for smaller developed countries, it may also be suitable for some developing countries with a very small number of research centres with strong libraries, for example in medicine, technology and the social sciences. Where such centres exist but do not have strong libraries, their collections may be worth strengthening, as an alternative to adding lending functions to the national reference collection. Much must depend on the existing situation,

for example whether a national collection of any strength exists or is planned.

Model C. Planned decentralization, which can be seen as a diluted form of Model B, may be suitable for some large developed countries that already have a sound basis for it; the Federal Republic of Germany is an example of such a country, where it would seem wasteful to plan a dedicated loan collection so long as the decentralized system works well. This model may also be appropriate for some developing countries with a moderate number of research institutions with existing good collections and with no obvious central collection on which to build. In most circumstances, however, Model C would appear to be inferior to Model B, except as a supporting system for Model A or Model B.

Model D. Unplanned decentralization is by definition not a system that would be planned to give an efficient interlending service. It is almost impossible to improve significantly, and the hidden costs of operating it are likely to be much higher than with alternative solutions. It may however serve as a useful support for strong Models A or B.

10.3 Other factors affecting choice of system

Union catalogues are essential for access to more than 2 or 3 libraries, and will undoubtedly form a permanent part of future interlending systems, whether unpublished, published, or accessible on-line. They need however to be carefully designed if they are to be effective and efficient. In particular, they should not be allowed to proliferate: the more union catalogues there are, the more difficult it is for the libraries using them. Comprehensiveness of coverage of libraries is much less important

than optimal coverage of titles, which may be contained in a relatively small number of libraries in the country. While within limited localities small union catalogues may be desirable and useful, regional union catalogues should not be encouraged, and at a national level there should be firm central coordination and control over union catalogues.

Automation clearly has a lot to offer union catalogues, in construction and maintenance, and possibly in use as well. Every opportunity should be taken when planning or reorganizing union catalogues to take advantage of automation.

Published union catalogues have a number of advantages, including the possibility of direct access to holdings of other libraries, but they also incur high costs, are never up-to-date, and make it almost impossible to monitor interlending and thus identify and remedy deficiencies in the system. The concentration of unpublished union catalogues in a centre to which most or all requests have to be directed may, provided the centre is efficient, be more cost-effective. More cost-effective still may be on-line access, which combines central control and monitoring with direct access to the holdings of other libraries.

Regionalization of interlending systems, while historically understandable, seems undesirable except in special circumstances, such as large federal states. Any benefits in speedier transportation seem likely to be outweighed by the need to switch a large number of requests between regions and by the costs of maintaining separate union catalogues with a high degree of overlap and probably poor central control.

Provision for all types of recorded knowledge is clearly an essential aim of the total system. However, different systems may be more effective for different categories; as already explained, Model A may be a very effective solution for scientific journals, but not for other forms of material. Strong central coordination is necessary to ensure that all forms of material are in fact available on interlibrary loan.

Hierarchies of provision or of access will exist with mixed models. A recognized order of requesting seems desirable, but this should not be rigidly imposed on libraries, which should be able to by-pass lower levels in order to obtain items quickly from higher levels in cases of urgency.

10.4 Two possible models for a developing country

With diffidence, we suggest two possible models that might be appropriate for a developing country.

The percentages given are for a system that has been developed over 10 years or more but that has not reached full maturity. They add up to 60% in both models; the aim after 20 years should be at least 70%.

Model 1

Serials. Central dedicated collection of 5,000 core science and technology titles, satisfying c. 50% of demand for serials and c. 33% of all demand. Specially organized to give a fast service, mainly by photocopies. Backed by humanities and social science serials in the national reference library (a further 5% of demand), again using photocopies as far as possible. Possibly supported also by selected specialist collections.

Other materials. Combined national reference/loan collection with adequate duplication of titles in heavy demand, satisfying c. 15% of all demand. Supported by unpublished union catalogues of selected (special or large general) libraries (c.7%). National library also serves as national interlending centre.

National imprints. Dedicated loan collection of documents published in the country attached to national reference collection.

Requests to be sent in the first place to the scientific serials collection or the national library, which redirect them as necessary.

Model 2

Science and technology. Concentration on three or four specialist libraries in government-funded research centres, planned to provide between them at least 5,000 core serials (33%), all with fully adequate photocopying and other facilities needed to provide a good and speedy service, and with sufficient duplication of both serials and other materials to serve both local and distant users adequately; backed up by union lists of selected libraries (7%). Satisfying in total about 40% of all demand.

Humanities and social sciences. Combined national reference/loan collection, with adequate photocopying and other facilities. Supported by unpublished union catalogues of selected libraries. Satisfying in total about 20% of all demand. National library also serves as national interlending centre.

National imprints. Dedicated loan collection attached to national reference collection.

Requests to be sent in the first place to the appropriate specialist collection or the national library, which redirects them as necessary.

10.5 Obstacles to interlending

Some countries, especially developing countries, face serious obstacles in interlending. In some countries, for example, the head librarian of a library is personally liable for all books lent out: a severe enough inhibition to lending to local readers, and understandably a major barrier to lending to other libraries. Photocopying equipment, whether for direct hard copying or for microfilming, is sometimes very inadequate both in the number and in the quality of machines, so that the supply of articles by photocopy is slow, expensive and cumbersome. Often a serious shortage of foreign currency makes borrowing from other countries very difficult. The postal service may not only be slow but cause losses of documents in transit. There may be a lack of paper for photocopying, or of spare parts for copying machines. Shortage of adequately trained staff may be another difficulty. Most of these problems are local to individual countries, and must be solved locally, but first the importance of solving them must be recognized.

A more general problem is copyright legislation; where copying fees have to be paid, high additional costs may be incurred, and where permission of the copyright owner has to be obtained, serious delays may result. Some way must be found of reconciling the legitimate interests of publishers, authors, libraries and users so that the communication of information by interlibrary transactions is not hindered.

10.6 Other aspects

10.6(a) Statistics. Before much improvement can be made to interlending in a country, the existing situation should be studied, to identify the likely volume and nature of interlending demand; and when a system is operating, its effectiveness and progress should be monitored by the regular collection of basic statistics. The data ideally desirable as a preliminary to systematic analysis are suggested in 'Principles of national interlending systems' prefacing this report (P1-4), but many countries may have to be content with less information. The basic statistics required for an initial study, and for regular monitoring, are:

volume of demand

form of document requested (monograph, serial, etc.)

source of supply

satisfaction level

speed of supply.

The statistics should be collected in a way that permits cross-tabulation, eg. speed of supply for different sources of supply.

10.6(b) The question of payment. The question of payment has been raised several times in this report. In the case of Model B, concentration of interlending demand on two or three existing large libraries, payment seems essential. Model A central collections may also recover at least part of their costs by charging libraries for each successful transaction; it is intended that the National Periodicals Center in the USA should, after the first two or three years of operation, recover all its costs.

Little is known about present practices of cost recovery within countries, although it is known that in many postal costs are reclaimed. Reclaiming

separately for each transaction must be very wasteful in staff time for both the claiming and the paying library, and if payment is made some simpler method should be devised. The mechanics of payment are not discussed here, but we wish to make the point that payment is or may be integral to the interlending system, and that the principle and practice of payment need to be considered at an early stage in planning. In developed countries at any rate, it seems that most libraries would rather pay for an efficient service than have a less efficient, or inefficient, service 'free': the penalty for a 'free' system being all too often heavy hidden costs. There are good theoretical arguments for at least a certain degree of cost recovery, notably that it gives borrowing libraries more incentive to ensure that they are not borrowing what it would be more economic to buy. There are equally arguments against full cost recovery by a national loan collection, since one of its major justifications may be that it enables other libraries supported by public funds to economize.

10.6(c) Interlending centres. Whatever system is planned, there must be some centre. The role of the centre can be limited to the minimal but vital functions of coordination, monitoring and modification as required, and of serving as a national focal point for international transactions; or at the other extreme it may be a dedicated comprehensive lending library which deals with most of the interlending demand in the country. Between these extremes, it may maintain the main union catalogues of the country, and perhaps serve also as the channel through which most requests are directed. Since planning for interlending should be undertaken as part of national library planning, and, as has been pointed out, it is integral to national acquisition programmes, an interlending centre should be linked with, if not part of, any national library planning centre.

There is also a strong case for links with national bibliographic centres so that on-line document requesting can be more easily planned and implemented. A further function could be that of a national centre where rare or valuable materials can be reproduced so that loanable copies are available.

The precise role of an interlending centre will differ according to local circumstances and the type of interlending system adopted, but the one essential is that it should be a strong centre with real authority in the functions it is required to perform.

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

1. Interlending systems should be recognized as essential elements in national library and information systems, and as such should be built into national library and information planning.

2. Each country should endeavour to provide and make available a full account of its existing interlending practices.

3. Each country should conduct studies to measure its interlending performance, in terms of satisfaction rate, speed of supply, and cost. It should also identify and examine the factors that contribute most to failure to supply, delay and high cost.

4. A standard form for the collection of basic statistics of interlending should be designed and promulgated, to aid individual countries and to assist comparisons between countries.

5. Intensive studies should be carried out in a few developing countries to assess the present situation with regard to interlending and to consider the best system to meet their particular situations.

6. Every country, whatever its nature, should accept full responsibility for supplying its national imprints, by loan or photocopy, to its own population and to foreign countries. This is best achieved by central collections, which in most cases will be appropriately linked with the national library and built up by legal deposit.

7. So far as is possible and economic, interlending demand should be concentrated on as few libraries as possible. In large developed countries, a central loan collection may be justified; in smaller developed countries, concentration on two or three libraries should be considered. In both cases, support from other libraries is required. In developing countries, combined national reference/lending libraries should be seriously concerned; in some cases, concentration on a few or several research collections may be a possible solution.

8. For immediate improvement, short-term solutions may be necessary, but these should be planned so that they contribute towards rather than inhibit long-term solutions, which should be conceived at the same time.

9. Barriers to interlending should be identified in various countries, particularly developing countries, and every effort should be made to remove them.

10. Subsequent to decisions in various countries on the basic structure of interlending systems, studies should be conducted into the mechanics and procedures of interlending, with a view to designing optimal procedures that might be applicable in other countries.

11. The concept of core collections of journals, satisfying a high proportion of journal demand, should be studied by detailed statistical analyses in selected countries, with a view to establishing the number of titles required to satisfy given levels of demand, and the similarity of core collections in different countries.

12. For longer term development, a predictive study of various alternative future scenarios for the supply of documents within countries should be carried out, taking into account recent and likely advances in technology relevant to the production, storage, requesting and transmission of publicly available information.

13. A special study of the implications of copyright legislation for interlending is desirable, to seek solutions that take account of the legitimate interests of all parties concerned without constituting any barrier, in cost or in delay, to effective interlending.

PRINCIPLES OF NATIONAL INTERLENDING SYSTEMS

Maurice B Line and Stephen Vickers

Physical access to material has largely been taken for granted but as interlibrary lending has increased so the design of interlending systems needs to be examined. 21 principles of interlending systems that are likely to be valid in the great majority of countries are listed, each with a brief introduction. It is hoped that the principles will provoke thought and discussion and perhaps improvements in interlending systems.

To provide access to documents is the main function of libraries. Much of the literature of librarianship has been concerned with bibliographical rather than physical access, which is largely taken for granted. The greatly increased volume of publication in recent years has stimulated major improvements in bibliographical access, which have in turn encouraged an increase in demands for documents. The same increases in publication and in demand have led to a decline in the self-sufficiency of local libraries, which have consequently had to rely much more on the resources of other libraries to serve their users. All developed countries have seen great increases in inter-library lending in the last 10 or 20 years, even though demand in many countries appears to have been severely constrained by the inadequacy of present interlending systems. Only recently has it been seen as necessary to look at interlibrary lending as an essential element in the library system of any country, and to design interlibrary lending mechanisms and procedures as a coherent system.

Although much work needs to be done on the optimal design of interlending systems, and systems will in any case differ according to local needs and circumstances, existing experience suggests a number of principles that are likely to be valid in the great majority of countries. These are set out below, in the hope that they will provoke thought and discussion, and perhaps action in some countries. The case for each principle is presented very briefly; full presentation of the arguments would have resulted in an extensive document.

Availability of documents is an international as well as national problem, but international availability must depend on effective national lending systems.[1]

The attention of readers is drawn to a parallel paper on 'Principles of International Lending', published in 1977.[2]

1. **Criteria for national lending systems**

   The three criteria by which national lending systems must be judged are:

   Satisfaction level (proportion of requests satisfied)
   Speed of supply
   Economics.

   The relative importance of these criteria may differ for different categories of document and user: for example, speed may be so important in some cases that cost is unimportant. In the general design of the system all three criteria are important, and an optimal balance should be sought between them, though the system should be such that in particular cases one criterion can be maximised at the expense of one or both of the others.

2. **Analysis of the problem**

   The problem must first be analysed systematically. This is the prerequisite of progress: until the size and nature of the problem have been studied, few systematic improvements can be made with confidence.

   The first step should be the collection of data on existing interlibrary loan demand and supply. Data should ideally be collected on:

   - *volume of demand
   - source of demand (type of library, geographical distribution, etc)
   - *form of document (eg serial, monograph, etc)
   - country of publication
   - date of publication
   - subject of document
   - channel used for requesting
   - *source of supply
   - *satisfaction level
   - *speed of supply.

Extensive cross-tabulation is required, eg satisfaction level for different forms of document with different dates of publication. For journals, titles should be ranked in order of the number of requests they receive, and the number needed to satisfy 70%, 80% and 90% of requests identified.

In many countries it will be difficult to collect some of the data ideally required, and in some countries most of the information may be unobtainable. In such cases, the basic statistics (starred) should be collected: they may prove quite sufficient for planning purposes. Planning should certainly not await the comprehensive collection of statistics.

The second stage is to identify possible alternative solutions, and compare them for cost and effectiveness (effectiveness being judged according to satisfaction level and speed of supply). All costs should be taken into account, including indirect costs and overheads. Systematic analysis often suggests measures that result in dramatic improvements yet are simple and economic to implement. It is likely that different solutions will be required for serials and other forms of material.

The third stage is to study how the best solution can be reached from the present situation with a minimum of disruption and cost. It will usually be wisest to start with journals and recent publications, since it is on these that most demand normally falls.

The system must take account of the fact that interlibrary loan demand may be severely restricted by inadequacies in the present system, and that an improved system will probably uncover a large latent demand, which may also change the nature of demand to some extent.

3. **Service to all kinds of library**
An interlending system should be designed to serve all kinds of library. A system designed to serve one kind only can almost certainly serve the needs of other kinds also; separate systems duplicate effort and may greatly increase cost.

4. **Unity of knowledge**
Systems should normally be designed to make provision in all subjects and languages. Knowledge cannot for practical purposes easily be broken down by subject, language or country of publication. An interlending service designed to satisfy needs in science and technology (usually the area to which attention is first given) will need to provide much social science material (eg industrial psychology, management and economics), and the resulting system would not require much extension to cover the humanities, between which and the social sciences there is in any case no clear dividing line. It may also be difficult to design economic systems to cater separately for the humanities and/or social sciences. There is even less case for differentiating by language or country or publication. Interlending systems that are built on the basis of strong collections specialised by subject or language should be co-ordinated to make between them total provision.

5. **Relation to the interlending systems of other countries**
The design of the interlending system should take account of the interlending systems of neighbouring and other countries. For example, a neighbouring country may have a comprehensive collection of some category of material on which reliance can be placed, or it may be worth developing the national system to give a service to other countries. Cultural and linguistic affinities may make close co-operation possible, especially in the case of some emerging nations that once formed larger units.

6. **Supply of national imprints**
The national interlending system should be able to supply all publications of the country, both within the country and to other countries. This is a cardinal principle of Universal Availability of Publications (UAP),[1] since each country is an obvious, and sometimes the only, source of its own publications. Interlending systems should be designed initially to ensure comprehensive availability of publications issued from a given (recent) date, and then to improve retrospective availability: the means of ensuring current and retrospective availability may well be different (eg central loan collections can provide current publications but not all older publications).

7. **Compatibility with other countries**
National interlending systems should as far as possible be designed to link with those of other countries, to simplify international transactions; though they may have different structures, they can have forms and procedures which make it easier to send unsatisfied requests abroad (see 13 and 14 below).

8. **Interlibrary borrowing versus local acquisition**
Libraries should not borrow items from other libraries when it is more economic to buy them. An interlending system is a supplement to local provision, not an alternative. The relative costs, which should take into account staff time, overheads and storage, will depend to a large extent on the expected use of an item. In particular cases however interlibrary borrowing of an item may be necessary because of the delay likely to be incurred in purchase.

9. **Adequate satisfaction level**
Any developed country should aim to satisfy at least 70% of the interlibrary loan demand in that country, preferably 80%. It seems likely that levels lower than 70% are unsatisfactory for users, because of the probable delays in obtaining items from abroad, and in the long term uneconomic, because dependence on other countries beyond a certain point is more expensive than provision within the country.

10. **Fast response**
All requests should be responded to quickly, whether or not they can be met. The need to make repeated application is a major cause of delay, and it is therefore all the more important to reply quickly to requesting libraries when items cannot be supplied or when there is likely to be serious delay in supply.

11. **Equal priority for local and distant users**
All libraries should give interlibrary loan requests the same priority as requests from local users. Since delay is bound to occur in sending requests and in sending items, local delays must be cut to an absolute minimum. The most serious delays in interlending in many countries occur not in transmission but in the requesting and (especially) the supplying libraries.

12. **Minimal number of channels**
Requests should go through as few channels as possible, and those channels offering the best chance of success should be used first. First-time success is very important in determining speed of supply: repeated requesting is slow and expensive. Also, the fewer libraries that are used as sources of supply the more they can gear themselves to offer a satisfactory service, and the more easily the system can be controlled; demand should therefore if possible be concentrated on a few libraries, although it may be necessary to call on the resources of others for a limited proportion of requests.

13. **Simple standard procedures**
Procedures should be as simple and standardised as possible, and designed to save time. For example, self-addressed labels can be sent with requests, or made part of a standard request form. It is clearly simpler and easier for both requesting and supplying libraries if standard procedures are used throughout the country.

14. **Standardised request forms (and other stationery)**
Request forms should be standardised, as should other forms concerned with interlending (eg recalls). Time is wasted both in requesting and supplying libraries if a variety of forms is in use. Standard forms can be cheaply and centrally produced. It may be beneficial to design forms that can be used if necessary for requests to other countries, or that are similar in design.

15. **Simple accounting**
Costs of individual transactions (postage etc) should never be reclaimed: the cost of reclaiming often approaches, or exceeds, the amount reclaimed. Either no money should change hands (eg on the principle of reciprocity or in a Government-subsidised lending scheme); or requests should be made on a pre-paid basis using flat rate charges, making it possible to buy coupons in bulk in advance or to use deposit accounts. Receipts, whether for payment or for documents lent, should never be required except in the case of items of special value or rarity.

16. **Payment to supplying libraries**
Means should be found of compensating net lenders. Few libraries lend and borrow equal numbers of items, and unless there is direct Government subsidy, net lenders will be subsidising net borrowers. Reimbursement will normally mean payment by net borrowers, who will thus have a direct incentive to improve their local availability (see 8 above). Unless payment is made, the relatively small number of libraries that satisfy most demand will tend either to give a poor service, or to restrict lending; it is unfair to expect them to give a good fast service free. Payment both enables and obliges them to give a good service. (It should be noted that the proposed National Periodicals Bank in the USA will endeavour to recover costs, and that a major factor leading to the proposal was the excessive burden carried by a few libraries.) In any case, interlibrary borrowing is never 'free': costs in the borrowing library (staff, stationery, return of borrowed items, etc) probably amount to between two-thirds and three-quarters of total interlibrary borrowing costs. Moreover, interlibrary borrowing is usually very cheap compared with alternative means of obtaining rarely wanted material.

17. **Minimal union catalogues**
Union catalogues should be kept to a minimum — of catalogues, and of libraries covered. Few union catalogues are up to date either for additions or deletions, and recent publications, for which demand is often heavy, are especially unlikely to be recorded. Moreover, union catalogues are costly to produce and maintain, and costly to use if numerous lists have to be consulted. Systems dependent upon large numbers of current union catalogues are unlikely to be efficient.

18. **Communications**
Systems should be designed to take account, and advantage, of modern communications systems. For

requests, telex, telefacsimile and computer transmission should be considered; for the actual items themselves, all available means of transport (post, rail, road), must be borne in mind, particularly where large distances are concerned.

19. **Flexibility**
The system must be capable of change. It must be able to adjust to changes in the volume and nature of demand; in particular, it must be capable of large and rapid expansion if required. (If it is a good system, it will probably generate greatly increased demand.) It must also be adaptable to changes in the form of primary publication (eg on-demand publication from microform), and in communications technology (see 18 above).

20. **Monitoring of the system**
The performance of the system should be regularly examined. This is necessary to study trends (in the growth and nature of demand), and to identify and remedy deficiencies. Basic statistics (eg volume of demand and basic satisfaction level) should be collected systematically as a matter of routine, and supplemented by special surveys for particular purposes, (eg satisfaction levels for different categories of material).

21. **Law of diminishing returns**
Beyond a certain point, extension and enhancement of elements in the system produce negative results. The law of diminishing returns applies to almost every aspect of interlending (and indeed of library practice in general). To give a few examples: Beyond a certain point, the addition of new libraries to union catalogues adds few entries in relation to the extra cost. Beyond a certain level of national availability, it is often cheaper and easier to apply to another country than to improve the national stock. With libraries, basic systems should be designed to handle the large bulk of requests quickly, the rest being dealt with as exceptions.

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